## 91700725 AW 9:

## CITY OF ROCKVILLE BOARD OF SUPERVISORS OF ELECTIONS ROCKVILLE, MARYLAND

ELECTIONS ADMINISTRATION FORUM
MAYOR AND COUNCIL CHAMBERS

1	PARTICIPANTS:	
2	Board Members:	
3	LOIS NEUMAN, Chair	
4	GRAHAM JOHNSON	
5	MELISSA JACKOWSKI	
6	STEPHEN WEINER	
7	Speakers:	
8	MATT MASTERSON	
9	JESSICA WHITE	
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- 1 PROCEEDINGS
- 2 (6:30 p.m.)
- 3 CHAIR NEUMAN: We're delighted that you
- 4 are all able to join us for our second Elections
- 5 Administration Forum that builds on the
- 6 recommendations from our previous session, and I
- 7 know some you were here with us for that one. So,
- 8 we're growing, and we're delighted that you're all
- 9 back again.
- You will notice we have two outstanding
- speakers for us to hear from this evening, and
- that was the result of discussions at the first
- 13 session.
- Before I formally begin, let me just
- state five things you need to know.
- The restrooms. Straight out the door,
- straight ahead, or to the right and to the right
- 18 -- both men's and women's.
- Microphones. Please leave them on.
- You'll see the green lights are on. When you
- introduce yourself and when you have any
- questions, you'll just speak directly into the

- <sup>1</sup> microphone.
- We are videotaping. It will be on
- 3 channel 11. We have evaluations for you in the
- 4 packets that you
- had on the table as you came in. We
- 6 appreciate your filling those out and turning them
- <sup>7</sup> in before you leave.
- 8 And, finally, food is here all evening,
- 9 so please feel free to get up at any time and help
- yourself.
- I would like to move on to introductions
- 12 and first introduce my colleagues on the Rockville
- 13 Board of Supervisors of Elections: Melissa
- Jackowski, that end; Graham Johnson; and Steve
- Weiner. We go in alphabetical order. (Laughter)
- We are also very fortunate that councilmember for
- the City of Rockville Beryl Feinberg is with us,
- 18 and she is at the end -- almost at the end of the
- 19 table.
- Did you want to say --
- MS. FEINBERG: I just wanted to say
- thank you all for what you do each and every day

- to make them have transparent and honest
- <sup>2</sup> elections. It's something we almost take for
- 3 granted but shouldn't. Having served on the
- 4 previous Board of Elections (inaudible), and
- 5 starting at four years old my mother took me with
- 6 her to elections (laughter) -- gosh -- so I think
- 7 it's in my DNA, but I remember the election
- 8 machines were (inaudible) curtain, so I know that
- 9 dates me, so thank you for coming tonight and
- 10 everything you do.
- MR. ROBSON: (Inaudible) (laughter).
- 12 CHAIR NEUMAN: And finally, all of you.
- We would like to have you know who each other is
- 14 and have you introduce yourselves. So, if we
- could go around briefly and share your name and
- your position, remember to speak into the
- microphone. So, we will start at this end.
- MR. ROBSON: Oh, good.
- 19 CHAIR NEUMAN: Okay, your last name
- begins with a Z, huh?
- MR. ROBSON: Jack Robson, and I'm chief
- election supervisor, City of College Park, College

- Park Board of Election Supervisor, all volunteers.
- We are not -- well, actually I get paid \$500 a
- year, but that's left over from a long time ago.
- 4 So, we're basically all volunteers.
- 5 CHAIR NEUMAN: And I'm Janeen Miller,
- 6 city clerk for the City of College Park.
- 7 MS. VISOCSKY: I'm Shannon Visocksy.
- 8 I'm city clerk for the City of Westminster.
- 9 MS. SHAW: Good afternoon. I'm Madeline
- 10 Shaw. I'm with the Town of Emmitsburg. I'm the
- 11 town clerk.
- MS. REAMS: I'm Laura Reams, city clerk,
- 13 City of Hyattsville.
- MS. HERNANDEZ: Awilda Hernandez, city
- clerk for the City of Bowie.
- MR. BARBER: Doug Barber, city clerk for
- the City of New Carrollton.
- MS. RAU: Kim Rau, city clerk, City of
- 19 Laurel.
- MS. ANDERSON: Bonita Anderson, city
- clerk, the City of Greenbelt.
- MS. GREGORY: Pam Gregory. I'm Board

- chair of the Board of Elections in Greenbelt.
- MR. GILBERT: Steve Gilbert, Greenbelt
- 3 Board of Elections.
- 4 MS. EVANS: Patricia Evans, Board of
- 5 Elections, Greenbelt.
- 6 MR. PAYNE: John Payne. I'm the newest
- 7 member of the Board of Election Supervisors,
- 8 College Park.
- 9 MR. VILLAO: I'm Carlos Villao. I'm
- with the City of Gaithersburg, Board of
- 11 Supervisors of Elections.
- MR. SNYDER: I'm Bill Snyder, City of
- Gaithersburg, Board of Supervisors of Elections.
- MS. BOARD: Hi, I'm Lynn Board, City of
- Gaithersburg, city attorney.
- MS. KLINGLER: I'm Lauren Klingler. I
- work for the City of Gaithersburg as their
- 18 elections clerk.
- MR. ALBRIGHT: Bill Albright, City of
- Gaithersburg, Board of Supervisors and Elections.
- MS. SABOL: Mary Grace Sabol, and I'm
- soon to be executive assistant to Kathleen Conway

- for City of Rockville.
- MS. CARPENTER: Jessie Carpenter, city
- 3 clerk for the City of Takoma Park.
- 4 MR. BRECHER: Finian Brecher, intern for
- 5 the City of Fairfax.
- 6 MR. ERNST: I'm Brian Ernst. I'm the
- 7 chair of the Takoma Park Board of Elections.
- 8 MR. OLSON: Arthur David Olson, Takoma
- 9 Park Board of Elections.
- MS. MILLMAN: Carol Millman, former
- 11 member of the Board of the Board of Supervisors
- and Elections for the City of Rockville, in the
- process of moving to Arlington, Virginia.
- 14 (Groaning, laughing)
- MR. JOHNSON: I'm Graham Johnson. I'm
- on the Board of Supervisors of Elections for City
- of Rockville.
- MR. WEINER: Steve Weiner, Board of
- 19 Supervisors of Elections, City of Rockville.
- CHAIR NEUMAN: And I'm Lois Neuman, the
- 21 chair of the Board of Elections for the City of
- 22 Rockville NEUMAN: Thank you and, again, welcome.

- 1 We will hear from both speakers, followed by
- questions and comments in an open question-and-
- answer session. Our speakers represent the
- 4 national and local perspective that is the country
- 5 and the county.
- 6 Our first speaker, U.S. Election
- 7 Commission Chair, Matt Masterson, is considered an
- 8 expert on elections administration throughout Ohio
- 9 and the country. He oversees the Election
- 10 Commission's mission to provide a clearinghouse of
- election administration best practices, administer
- voluntary voting machine certification system, and
- 13 survey election administration practices. He will
- share with us his vision on the future of
- 15 elections.
- Matt.
- MR. MASTERSON: Well, thank you all, and
- 18 I can tell you what a privilege it is to be here.
- 19 Thank you so much for the invite and to Kathleen
- <sup>20</sup> for sticking with me, making sure we get it
- 21 scheduled.
- What I hope to do today is provide a

- 1 national perspective, a little bit on where we are
- voting technology, where I think we're going, and
- 3 a little bit of a tale, and the reason that I have
- 4 the yin and the yang on the slide is something
- 5 that election officials deal with every day but a
- 6 little bit of the tale that's come out of this
- 7 last election of security versus access. So,
- 8 talking a little bit about our current threat
- 9 environment, risk environment that we existing --
- 10 coming out of this last election, and kind of an
- 11 honest look at that as we look at serving voters,
- because in the end the focus of all of this is
- providing services to voters -- right? -- making
- 14 sure that voters have an experience, a voting
- experience that allows them to have confidence in
- the process, to feel like their voice was heard,
- and move forward. So, I hope I can provide that
- 18 perspective. I look forward to most engaging you
- 19 all in questions and answers afterwards. It's
- where I think there's a (inaudible) that the EAC
- do our best work is listening to election
- officials and trying to provide information and

- best practices based on that.
- For those that don't -- how many in the
- 3 room are at least familiar with the Election
- 4 Assistance Commission? It's okay to be honest. I
- 5 don't take it personally at all.
- 6 Oh, a good number. A good number.
- 7 That's awesome. So, for those -- quickly -- that
- 8 don't know, we're a
- bipartisan federal agency that was
- created after the 2000 election. We have three
- main tasks. The first is to provide a voluntary
- 12 testing and certification program for voting
- 13 systems. So, we develop standards. We accredit
- 14 laboratories, and then we test and certify voting
- systems in a voluntary manner. So, states and the
- manufacturers choose how to use our program. 47
- out of 50 states use some part of our program, so
- 18 some states require full certification with that
- 19 sticker on the voting system, which I think --
- correct me if I'm wrong -- is the case in
- 21 Maryland?
- Yes? She's like: I think so, I don't

- 1 know.
- SPEAKER: No.
- MR. MASTERSON: Ohio that was the case.
- 4 In some states they just require testing by one of
- our accredited laboratories; in some states
- 6 they'll use our standards but do their own testing
- 7 in a variety of ways. And so it's meant to be a
- 8 service to the state and local election officials
- 9 to at least baseline the functionality of the
- 10 systems -- the security, the accessibility, the
- overall accuracy of the systems. And so that's
- the first thing we do.
- The second is we provide best practices
- 14 and information on election administration. We're
- a clearinghouse of that. So, if you were to go to
- 16 EAC.gov and check out our website, you'd see a
- variety of resources on everything from serving
- 18 voters with disabilities to securing voter
- 19 registration databases to providing services for
- 20 military and overseas voters to list maintenance
- 21 -- you name it. Poor worker training and
- recruitment is a big focus for us, because we know

- that's a constant challenge. So, anything and
- everything for election officials and voters, some
- 3 look-up tools and whatnot for voters and
- 4 registration information.
- 5 And then finally we do the Election
- 6 Administration and Voting Survey, which is a
- 7 collection -- the largest collection of election
- 8 administration data done in the United States.
- 9 It's over a million datapoints from all fifty
- 10 states and the four territories on everything from
- provisional balloting to early voting to voting
- machine types -- you name it, we collect it, and
- it's at times a challenge I know for the states
- and locals, but it really serves as sort of a
- census on where we are in election administration.
- 16 I'll actually share some of the data here today as
- we talk about the future of election technology.
- So, with that -- that's the EAC. I
- 19 promise I won't go back to the commercial. I'm
- done with the commercial part of the EAC, but I do
- encourage you -- I've got cards with me -
- contact us any time. We're here to serve election

- officials. Our job is to serve you all and
- voters. We're a staff of about 27 people, and so
- 3 all of us engage every day with election
- 4 officials, and that's what we like about the job.
- 5 So, with that, I'm going to start by
- 6 setting the scene post-2016 and talking about
- 7 where we are and then look at sort of the
- 8 technology and how I think that's going to be
- 9 impacted, and then we'll do questions and answers
- 10 hopefully to get into the discussion.
- So, Election Day 2016. I'm sure all of
- you were familiar in the run-up. I've never seen
- a run-up to an election like 2016. There were
- 14 conversations about hacking and rigging and
- physical security at polling places, right?
- 16 Sometimes I even forget that that was a large
- discussion at the time and conversations around
- 18 the process, but we made it. We made it to
- 19 Election 2016, and we were focused on where, when,
- and how to vote, and by many accounts, talking to
- 21 election officials, the presidential election from
- 22 an administration standpoint went as smoothly as

- any election that they had run. And that's a real
- 2 credit to the election officials across the
- 3 country. They were confronted with challenges and
- 4 constant conversation about a variety of topics,
- 5 and they stepped up and ran a really good process.
- And usually after an election when you
- 7 have that -- you close out the books, you go
- 8 through your canvass, and you at least get week to
- 9 kind of debrief and decompress. That wasn't the
- case this time. It hasn't stopped since, has it?
- We've continued the conversation. In many ways
- that's good; in many ways, that's a huge challenge
- 13 for election administrators across the country.
- You all have been faced with headlines
- like this: Russia hacked voting systems in 39 or
- was it 21. Are you one of the states? How do you
- know if you're one of the states? Has anyone told
- 18 you that your systems experienced one of these?
- 19 In many cases, election officials at both the
- state and local levels are being presented with
- 21 headlines that they didn't even know something
- 22 happened -- right? -- they hadn't been alerted.

- And so you all have been challenged:
- How do I respond to this? What question are you
- 3 asking me? What do you, you know, say has
- 4 happened, and what are you talking about, because
- 5 it's in this headline? And so you've been asked
- 6 to be responding to new issues without any
- 7 warning, without any information about really
- 8 serious threats to the election system when we
- 9 talk about nation-state actors. Whether it's
- 10 Russia, North Korea, or otherwise, those are
- large-scale threats. And then you've got a
- 12 conversation that's continued around -- the cyber
- 13 attacks are going to get worse, and so the ongoing
- conversation is not only what happened in 2016 but
- what are you doing to prepare going forward? Have
- 16 you been trained on cyber security? What
- resources are available to you? What steps have
- you taken to secure the voter registration
- databases, the voter look-up tools? And so this
- 20 conversation continues as you all are trying to
- debrief from 2016 and look forward to serving your
- voters this year and next.

- But the threats aren't limited to just
- what the headlines around the election are. The
- 3 reality is that the threats -- particularly for
- 4 nation-state actors, the security threats are ever
- 5 present in any IT system, and so the nation- state
- 6 threats like the "Wanna Cry" virus -- how many are
- 7 familiar or saw the news reports around "Wanna
- 8 Cry"? and the "Ransomware" attack that shut down
- 9 some hospitals and other? That could very easily
- be election offices as well, because it wasn't
- isolated and targeted at specific systems
- 12 necessarily but operating systems that are common
- 13 across computer platforms across the country.
- And so those nation-state threats in the
- security environment exist for election officials,
- election offices just by the nature of being IT
- 17 providers. You all administer IT systems. And
- 18 it's your websites as well. This comes from my
- 19 home state of Ohio, and these aren't nation-state
- 20 actors but these are more malicious actors --
- 21 right? -- ISIS in this case defacing the website
- just to discredit -- right? -- to draw some sort

- of confusion or to undermine confidence in the
- 2 governmental structure, whether that's elections
- or otherwise. And so this is now part of your
- 4 threat profile and defense profile.
- It's not about one country or one actor;
- it's about the fact that sophisticated, complex
- 7 actors are targeting systems that could include or
- 8 do include election systems. And this is a new
- 9 operating environment for you. Election officials
- 10 have thought about security for years and have
- worked really hard to secure systems in a variety
- of ways, including physical security, logical
- 13 security, whatnot. But this introduces a new
- sophistication and complexity to your world.
- And then there's a recognition that you
- all don't really get a whole lot of resources, do
- you? You don't get a lot of support. The last
- 18 federal funding provided for elections was from
- 19 HAVA back in 2002, and state and local officials
- 20 typically are vying against lots of other areas to
- qet the resources you need not only to replace
- 22 aging equipment but to secure your systems, to

- provide accessible polling places, and so on. And
- 2 so you all are asked to defend yourselves and
- 3 protect your systems with very limited resources.
- I had an election official tell me once
- 5 that they were trying to get an upgrade to one of
- 6 their systems but they lost out to the gazebo in
- 7 the park, right? And you all know that. You know
- 8 you're not typically viewed as essential in
- 9 needing that support, and so this challenge
- 10 remains even as you look at this.
- And then you're going to have to respond
- to the next headline -- and I love this, because
- it kind of advertises the fact that you don't know
- what the next headline coming your way is. You
- don't know the next question you're going to be
- asked or the next reality for your job, and so
- you're having to anticipate the things you're
- 18 going to be asked to respond to moving forward.
- 19 And so it -- not only are you responding to what
- happened before, but you're being asked to respond
- to things that you don't even know are coming.
- So, how do you cope? How do you move

- 1 forward? Well, the challenge for you I think as
- <sup>2</sup> election officials is to identify those things
- 3 that matter, those things that are within your
- 4 control, truly within your control, and where that
- 5 mesh point is so that you can identify priorities.
- 6 And so we'll talk a little bit about those
- 7 priorities as we look at technology in the future
- 8 moving forward and perhaps some techniques that
- 9 can help.
- This is my favorite slide to show to
- election officials. This is what a typical state
- or local election office looks like as far as the
- 13 complexity of the IT systems. So, I like showing
- this, because when people ask election officials
- 15 -- spouses or otherwise -- what do you do the
- other 364 days a year? You only work one day a
- year. You know, you could point to this and say:
- 18 Actually, these are just the IT systems I have to
- run in my office. This is how complex my job is.
- In many states or counties, in many counties, the
- 21 county IT office -- so, even in some cities -- the
- 22 elections office has the most IT systems of any of

- the offices. When you add up the voting machines,
- which are IT systems, as well as voter
- 3 registration databases -- e-poll books, ballot-on-
- 4 demand printers -- you know, you name it on this
- 5 slide -- the reality for you all -- your reality
- is that you all are complex IT system managers.
- Gone are the days -- and someone
- 8 referenced lever machines before, which I love --
- 9 gone are the days of the lever machine, right?
- 10 You all are administering complex systems, and
- that is important and we'll talk a little bit why
- that's important and why we've trended that way.
- 13 But it's part of your reality now, and so election
- officials now can no longer say: Well, I'm not an
- 15 IT person; I'm not really an IT person; I leave
- the technical to so-and-so. The reality is your
- job now requires you to understand the IT systems
- within your office, and so securing those,
- understanding those is part of your job now.
- So, that kind of concludes the current
- 21 state, the security, and I raise that because the
- next part is going to talk about the future and

- sort of where the trends are. But the reality is
- that coming out of 2016 our environment, the fact
- 3 that we're talking about having to secure systems
- 4 against sophisticated attackers is going to impact
- 5 the future of elections. Some of the trends that
- 6 we see, some of the trends that we thought we'd
- 7 see -- I'm sure many of you were asked, for
- 8 instance, about Internet voting -- this new
- 9 reality is going to greatly impact your risk
- 10 environment and decision- making around new
- 11 systems. And so I think some of the decisions you
- 12 all would have thought you would have made before
- this are now impacted by that security
- 14 environment. So, does that make sense, given
- where we are?
- So, with that, this is sort of a quote
- from one of the best election officials I know,
- 18 Neil Kelly in Orange County, Ohio, and he says --
- 19 you know, we were talking about serving voters,
- improving the election process, and he said:
- Look, Matt, voters are just looking to get their
- ballots on their terms: when they want to vote,

- 1 how they want to vote. They want to get their
- 2 ballot and vote it on their terms. And so that
- 3 thought process, that voter-centric design is now
- 4 driving a lot of election administration
- 5 decisions. We see across states in law changes,
- in process changes, in procedure changes a trend
- 7 towards trying to serve the voters when they are
- 8 ready to vote as opposed to that one singular day,
- 9 that is, Election Day. Put another way, someone
- said to me: You know, voters want to vote in the
- way they live their lives, right? Smart phones
- 12 and convenience voting and the ability to interact
- on mobile devices are really impacting, and the
- 14 reality is other government services are now being
- provided that way, and so they just assume that
- voting is going to turn that way for them as well.
- But of course you've got that complex security
- environment to tackle as we look at this.
- So, what does the data tell us about the
- trends in the future of voting? And this comes
- 21 from the AEC's Election Day survey, so this comes
- directly from the states and locals as they report

- 1 it. First is, in the last election we had
- percent of the U.S. civilian voting age
- population were just over 140 million voters vote
- 4 in the last election. About 214 million citizens
- 5 are registered, so the registration rate was
- 6 actually increased 6 percent from the prior
- 7 election, even as turnout remained basically the
- 8 same, a little bit higher, but basically the same.
- 9 So, folks were registering more, but then, you
- 10 know, not voting at the rate that at least someone
- 11 expected them to.
- Online voter registration. So, one of
- those convenience voter services trying to serve
- 14 voters in a way that they live their lives has
- taken off. 17.4 percent, which may not sound like
- a lot, is a huge jump from just 2014 when it was
- only 6.5 percent. And at this point, the majority
- of states -- a large majority of states -- now
- offer online voter registration. So, it's an
- 20 expectation in elections now that voters are going
- to be able to register to vote online.
- More than 41 percent of ballots -- that

- should say "cast"; I apologize for the typo --
- were cast before Election Day. So, 41 percent of
- yoters voted prior to Election Day. Again,
- 4 speaking to this desire for voters to vote when
- 5 they want to, and so I know here in Maryland as a
- 6 Maryland voter that's an option here in Maryland,
- 7 and it's becoming increasingly popular across the
- 8 country, and that's whether you're voting early by
- 9 mail or having early voting or in- person absentee
- 10 voting option.
- 930,000 UOCAVA ballots were transmitted
- 12 from military and overseas voters for those not
- familiar, so absentee, military, and overseas
- voters were 68.1 percent returned. And the
- significance of that is in part that since 2010
- military and overseas voters, in federal elections
- 17 at least, have to have the option to receive their
- ballots electronically, so receive them, not
- 19 necessarily return them, although in some states
- you can do that as a military or overseas voter.
- 21 And so we see an uptick in the number of voters
- that want to take advantage of that. Of course

- here in Maryland there's an option, at least I
- think at the state level, for voters to request
- 3 their ballots and receive them electronically if
- 4 they choose. And so that's one of those
- 5 convenience trends that we're seeing as we look at
- 6 the trends moving forward.
- 7 2.4 million provisional ballots cast,
- 8 with percent coming from California -- so, one
- 9 state accounting
- for the provisional ballots, with 71
- 11 percent counted. Part of what that tells us is,
- one, California had a lot of provisional ballots,
- but two is that the lists are being better
- 14 maintained, that programs like ERIC, which I know
- 15 Maryland is engaged in, are allowing election
- officials to maintain the lists more accurately,
- which is resulting in voters getting regular
- 18 ballots instead of provisional ballots and being
- 19 able to engage the process and have their
- information updated more regularly so they're
- 21 receiving their ballot.
- And that's important not just from a

- list maintenance standpoint but from a voter
- 2 service standpoint. You all have experienced when
- a voter shows up and told they have to vote
- 4 provisionally even if they go through that
- 5 process, frequently they're discouraged. They
- 6 want to know what went wrong in the process: Why
- 7 wasn't my information just updated. Research
- 8 shows that most voters assume that their
- 9 registration information is automatically updated
- no matter where they move -- in-state, out of
- 11 state, in-county, out of -- they just assume:
- Once I register once, that will just follow me
- wherever I go. And so that's a unique challenge
- that election officials have begun to tackle with
- online voter registration, with some work done
- with DMV, with automatic registration, or with
- updated motor voter registration.
- And then from 2012 to 2016 there was a
- 19 75 percent increase in the use of electronic poll
- 20 books. And I know they're used here in Maryland.
- 21 Electronic poll books have become not just an
- 22 important efficiency measure for election

- officials, but it again speaks to voters when they
- engage in the process and see that kind of modern
- 3 technology begin to recognize the process more.
- 4 Checking in and having someone look your name up
- in the book is becoming less common, and they're
- 6 seeing you all use tablets or other devices to
- 7 check them in and be able to direct them to their
- 8 correct polling place if they're in the wrong
- 9 polling place. Many of the e-poll books will
- 10 have mapping features, right? So, you could say
- 11 I'm sorry, you're in the wrong place but I can
- 12 actually tell you exactly how to get to your
- 13 correct polling place. And so that's new services
- 14 for voters, new technology for you all to
- administer and secure though.
- So, just quickly, to go through this,
- this is the current kind of makeup of voting
- 18 systems across the country. Paper ballots versus
- 19 DREs with a VVPAT -- obviously, Maryland made the
- switch to all paper relatively recently. The
- trend across the country is to move toward some
- sort of paper-based or auditable system. Just

- 1 short of 80 percent of the ballots cast in this
- last election had some sort of corresponding paper
- 3 record with them, whether that's a VVPAT or a
- 4 hand- marked paper ballot or a ballot marked on a
- 5 ballot marking device, either remotely or
- 6 otherwise.
- 7 This is just a typical system. I know
- 8 you all have it. I like to show this system in
- 9 part, because one of the things -- if you see the
- 10 kind of a hood on it, and it's sitting there, it
- allows a voter to not only verify -- so it marks
- the ballot and marks a physical paper record and
- shows it to the voter. But then once the voter
- verifies it, it'll drop it through the scanner
- without them having to touch it, without them
- having to handle it.
- And this is particularly important,
- because one of the unique challenges with voting
- is that it's required and it needs to be done
- 20 privately and independently. So, voters with
- 21 disabilities are afforded the right to vote
- 22 privately and independently, without their

- assistance, and so paper ballots at times can
- challenge that. Someone who's blind, someone who
- 3 has manual dexterity issues, whatnot, paper is not
- 4 an ideal solution for them, right? And so the
- 5 elections community, those of us at the EAC and
- 6 states and locals, have demanded from the vendor
- 7 community more accessible solutions, and so this
- is one of those approaches where the voter never
- 9 has to handle the ballot to be able verify it and
- submit it through the scanner.
- This is another example. It's a ballot
- marking device. It's familiar to you in Maryland,
- 13 right? The DS200 and the -- I'm blanking on the
- 14 \_\_
- The Express Vote, thank you -- I almost
- said E-Vote and I'm, like, I don't to say that.
- But down on the bottom there, the
- 18 yellow, that's a prototype -- and this is
- interesting and important as we look at the future
- of election technology -- that is a prototype of a
- 21 system designed and built by LA County, so Los
- 22 Angeles County, California.

- Los Angeles is building their own voting
- 2 system. To give perspective on that, Los Angeles
- 3 County, if it were a state, would be the 13th
- 4 largest state in the country. It is by far and
- 5 away the largest voting jurisdiction in the
- 6 country, and so they have resources. They have
- 7 things like a county IT department and have been
- 8 able to dedicate money to developing their own
- 9 voting system, and the starting point of that
- development for their new voting system is the
- 11 voter experience.
- And so the first thing they did was
- engage a contractor and went out and asked voters:
- 14 How do you think you should be able to vote? What
- should the voting process look like? Feel like?
- 16 Advance for you? And so one of the overwhelming
- 17 results of that research was that voters want to
- vote when they want, but they also want to engage
- 19 using devices or technology that they want.
- So, the design, the prototype of this
- would allow someone to bring in an already marked
- sample ballot on their I-phone, scan it. It will

- produce a paper record that they can verify,
- confirm, and drop. And, actually, the Express
- 3 Vote has technology like that that some states
- 4 allow the use of or not. And so the idea is that
- 5 the voter can interact and make their decisions in
- 6 their own home but still have the experience of
- <sup>7</sup> going to a polling place or going to a vote center
- 8 to vote. And the research that they did in
- 9 academic research is that, to many Americans, the
- 10 communal experience of going to the polling place
- 11 is a significant one.
- So, someone already mentioned: My
- mother took me with her to go vote. Right? And
- 14 so that is a very Norman Rockwell American
- experience and incredibly important to millions of
- 16 Americans.
- And so when LA County was doing this
- 18 research, that ability to do that was important to
- 19 a lot of people. And so they want to serve that.
- <sup>20</sup> California, like many states, is moving largely to
- vote-by-mail, but they still want to offer an
- opportunity that even if you get your ballot in a

- 1 variety of ways, you can show up in person and
- vote so that they can bring their children and
- <sup>3</sup> engage in the process.
- Early and absentee voting. It's here.
- 5 It is popular. Again, more than 40 percent of
- 6 people voted either early -- voted before Election
- 7 Day, and it's used in a variety of ways across the
- 8 states. So, some states still -- someone
- 9 mentioned -- someone might be here from Virginia,
- 10 but Virginia remains -- you've got to provide an
- 11 excuse. Although, there are many excuses, and I
- don't think they're checked terribly closely but
- -- in other states -- in many states you don't
- 14 have to provide an excuse. So, the trend is
- towards early and absentee voting. Of course the
- amount and types vary state by state drastically.
- And that means different technology.
- 18 So, the embrace of early and absentee voting means
- the embrace of new types of scanners. So, this is
- 20 a high-speed scanner.
- How many are familiar with high-speed
- scanners like this? So, a few of you.

- 1 This is designed to process quickly
- centrally counted ballots -- so, absentee and
- early ballots. So, this machine, when you fire it
- 4 up -- and there's a variety of different
- 5 manufacturers that make these -- it sounds like a
- 6 jet engine, honestly. It's got a high-speed motor
- 7 in it. It scans the ballots as it goes, collects
- 8 the ballot images, and counts -- and you can do
- 9 thousands of ballots per hour using this. And
- 10 this was a result of early and absentee voting --
- the increase in early and absentee voting --
- because no longer were you scanning ballots at the
- polling place but you were counting them centrally
- 14 as you received them back.
- Vote centers. In 2006/2007, the general
- 16 consensus was that vote centers was the next big
- thing in elections, that they would allow for
- 18 efficiency of voters to go to a variety of central
- 19 locations across a county or jurisdiction, get
- their ballots (inaudible) and voted when they
- <sup>21</sup> wanted.
- I think both resources in technology as

- well as some challenges that folks have found --
- 2 that vote centers haven't taken off completely,
- 3 but the concept behind them has. So, the idea
- 4 that voters could go to a variety -- instead of
- 5 going to a singular polling place on Election Day
- 6 could go to a variety of locations across a county
- when convenient. So, if they're out shopping at
- 8 the supermarket and the vote center is located
- 9 next door, they could drop, go ahead and vote
- while they're there, and move on.
- And so, particularly with early voting,
- in many states vote centers are utilized. The
- 13 Colorado model -- what's now known as the Colorado
- 14 model -- although Oregon and Washington I think
- would object in many cases, so Colorado has moved
- to a largely vote-by-mail jurisdiction. So, they
- mail ballots to all registered voters, but they
- 18 provide a variety of options for those voters to
- 19 return it. And most voters, the majority of
- voters, return it in person. So, they receive it
- 21 by mail but they like to go drop it off.
- 22 And so Colorado has, across its

- counties, a certain number of what's called voter
- 2 assistance centers that are essentially vote
- 3 centers where you can drop your mail ballot. You
- 4 can go vote on an actual physical machine, so this
- is an example of Denver and their vote center, so
- 6 you can vote physically if you want that
- 7 experience of voting on a machine. It also
- 8 provides full accessibility, so voters with
- 9 disabilities can go to any of the voter assistance
- 10 centers and interact.
- So, the key to that for Colorado is
- 12 first they have the poll books so that the picture
- you see on the top there -- there's the check-in
- 14 stations, and Colorado offers another service to
- voters that impacts the technology they use. They
- offer same-day registration. So, you could show
- up, register to vote. It automatically checks you
- in to the statewide system, and then you go over
- 19 to the machine or you drop your - you know,
- whatever you need to do to get your ballot,
- interact, and vote. And so Colorado has gone to a
- very voter- centric approach. They've seen their

- 1 provisional ballots drop -- and I may get this
- number wrong, but around 200 percent. They had
- yirtually no provisional ballots largely because
- 4 of same-day registration but also because of some
- of the list maintenance work they've done and the
- 6 voters were able to vote.
- 7 The other interesting thing that speaks
- 8 to the future of voting technology is their system
- 9 -- and it's going to be a statewide system in
- 10 Colorado, so Colorado is moving to a statewide
- 11 voting system. Their voting system, like the one
- you see on the screen and the back-end tally
- 13 system utilizes commercial off-the-shelf products.
- 14 So, instead of a monolithic voting system, that's
- proprietary -- right? -- made by a company with
- proprietary hardware and software. The hardware
- used in Colorado could be purchased on Best Buy or
- 18 Amazon, and then they load the software up on
- 19 there. So, the printer, the touchscreen -- so
- they use a tablet touchscreen and then the printer
- that prints it, as well as even the beveling
- 22 system that holds the tablet -- that's all

- commercial off-the-shelf. So, the only thing they
- use the vendor for is the purchase of software to
- 3 load on those systems, and that has really
- 4 important efficiency implications for election
- officials so the ability for them to upgrade --
- 6 tablets for instance -- is much more efficient but
- 7 it also has implications as they manage the
- 8 system. So, instead of having a system that's
- 9 been tested and certified and sitting right there
- in front of you introducing a tablet -- how many
- of you have iPads or a tablet at home?
- So, a good number of you. How many of
- you have it just to update -- software
- update whenever it's ready -- so, update
- overnight when you plug it in, right? Well,
- that's awesome and convenient for you as someone
- that owns a tablet. When you're talking election
- 18 systems, it can break the system, right? If
- things could not work, how many times have you
- 20 lost connectivity with your wireless printer
- because of a system update and you're, like, what
- happened?

- Well, for election officials on election
- 2 day, if those things update overnight you could
- 3 have a serious problem when you show up in the
- 4 morning. And so there's a system integration
- 5 challenge for election officials with commercial
- 6 off-the-shelf products.
- 7 There's a challenge. Now you all serve
- 8 as the system integrator. You all have to test
- 9 the systems and make sure that you have the
- setting set so that the Wi-Fi is not turned on, so
- that the updates aren't done automatically, so
- that, you know, it's not -- it doesn't have
- 13 applications that it shouldn't have on it, because
- 14 you're just purchasing them off the shelf. And so
- for some jurisdictions, that works wonderfully.
- 16 Colorado -- the state helps administer that and
- manage it. For other jurisdictions, if you don't
- have IT support, if you don't have the time to
- manage that, that has very real implications and
- 20 challenges. So, there's a cost benefit that goes
- with commercial off-the-shelf but I think it's a
- trend we're going to see almost certainly, and

- 1 election technology is a move towards using
- 2 commercial off-the-shelf products (1) because
- 3 they're affordable but (2) because they're
- 4 familiar to voters. Voters recognize an iPad or
- 5 some sort of tablet device in that way, and I
- 6 think election officials like to provide that.
- 7 Interestingly with Denver, they've just
- 8 recently set up a program with their school system
- 9 where when they upgrade their tablets, they're
- 10 going to provide the old tablets to the school
- 11 systems in Denver for the students, which is kind
- of an awesome service, but also as election
- officials argue for resources, the ability to --
- 14 how many election officials get told: We only use
- the system once a year and then we pay to store
- it, right? Or it sits in mothballs for seven
- months out of the year. Well, now you've got the
- ability to say: Well, you know, when we're done
- with this, we'll be able to provide it to the
- school system or the auditor's office or the
- county commissioners, whoever it may be. And so
- part of the selling point of COTS is this ability

- to -- once we're done with it we can provide it
- other places and use it, which a voting system --
- a monolithic voting system doesn't necessarily
- 4 have.
- 5 All-mail elections, as I've talked
- 6 about, are becoming popular out West. I think the
- 7 significance of that is one that -- we see
- 8 vote-by-mail just increasing in general. In many
- 9 states, 30 to 35 percent of voters will take
- advantage of vote-by-mail if it's offered to them,
- and these states proactively mail out ballots to
- everyone. Washington and Oregon have been doing
- 13 it for years, and if you talk --
- How many -- is it random? -- how many
- have talked to an election official from
- Washington or Oregon? A couple? Man, do they
- 17 love vote-by-mail. I mean, it's all they talk
- 18 about. You want to talk about lunch and they want
- to talk about vote-by-mail. But they really love
- it, and their citizens love it, and it's working
- well for their state. And so vote-by-mail is big
- out there. I think as you move east you see a

- difference in culture as far as use of the mail
- truck (skip in the recording) in the mail but it's
- 3 increasing across the country as far as just
- 4 general use.
- 5 Here's -- this is from Denver, and this
- is an example -- actually, this is from another
- 7 county in Colorado I think -- this is an example
- 8 -- this is a gentleman that got his vote-by-mail
- 9 ballot in Colorado, and they set up bike- through
- and drive-through drop-offs throughout the city
- 11 and state. Again, this trend towards serving
- voters, right? This trend towards trying to meet
- voters. So, they set up in the middle of the
- 14 street, flag it, cone it, and the majority of
- voters in Colorado drop their ballots instead of
- mailing them back. And so this is a way that they
- try to serve those voters. It's kind of neat.
- 18 It's neat to watch, if you haven't been out there,
- 19 the variety of ways -- driver-through,
- bike-through, walk-through -- in order to drop,
- 21 and they collect the ballots throughout the course
- of the day.

- And then e-poll books. We've already
- 2 talked a little bit about that. The trend is
- 3 absolutely towards using e-poll books. More and
- 4 more states are using them, which also means more
- 5 and more states are testing and certifying e-poll
- 6 books.
- 7 At the EC we only test voting systems;
- 8 we don't test the electronic poll books or voter
- 9 registration data bases. But more and more
- 10 states, particularly coming out of this last
- election cycle, are finding the need to rigorously
- test e-poll books and assess what risks do these
- introduce into the environment? What services do
- they provide? And how can we better secure them?
- Because there's been a lot of
- 16 conversation around the voter registration
- databases but also around -- if you were to mess
- with e-poll books and change the list, what impact
- would that have? And so that's a challenge I
- think states and locals are struggling with now as
- you look at e- poll books. But the fun part with
- e-poll books is that they're efficient. They

- allow you to accurately look people up, so the
- ability to type in someone's last name and pull
- 3 the correct name as opposed to getting the line
- 4 wrong. And how many times have we seen where
- 5 someone signs on the wrong line, whatnot, as well
- 6 as really efficiently exports the data? So, when
- you are done on Election Day, the ability to
- 8 export voter history and whatnot is super easy
- 9 into your voter registration database instead of
- scanning barcodes for days on voter registration
- 11 lists, and again some of the voter services they
- provide, it's almost -- I won't say it is
- impossible -- it's almost impossible to do
- 14 same-day registration without some sort of e-poll
- book, because you need that real-time lookup with
- the voter registration database in order to do it,
- as well as looking up voter locations and polling
- 18 places.
- So, again, another piece of technology
- 20 as we talked about in the beginning, the security
- threats. These are wonderful pieces of
- technology, but now we're all having to assess

- what risks do we introduce into the process? How
- can we secure it? And the good news for election
- officials is you all are really good about
- 4 thinking about what could go wrong.
- 5 Election officials spend a lot of time
- 6 asking themselves what could go wrong. How do I
- 7 fix it? And then mitigating that and then asking:
- 8 Okay, what else could go wrong. And so the
- 9 challenge I think for all of us in the elections
- 10 community is to take that mindset and apply it to
- 11 IT systems. How can we evaluate the risk to IT
- 12 systems, and what could go wrong?
- Just to combine the yin and the yang
- 14 from this conversation, there's research that was
- done from the Democracy Fund on voter confidence
- or coming out of this last election, so this is
- after the 2016 election. 85 percent of voters
- 18 said they had a pleasant experience on November
- 19 8th, that they had a pleasant voting experience
- with 59 percent of respondents believing the
- 21 election was fairly determined or fairly
- 22 administered.

- So, with all the conversation that we
- were having before and has happened since, voters
- 3 still enjoy the voting process, engaged in it, and
- felt like it was fairly administered. So, that's
- 5 the good. That's the yin and, generally speaking,
- 6 voters say about their election experience: Well,
- <sup>7</sup> in my county or in my city or in my township they
- 8 do a really good job, but those others ones -- I'm
- 9 not so sure about those other ones. Right? So,
- they have confidence in their process, and that 85
- 11 percent number I think is significant, in part
- because it speaks to this voter- centric approach
- that's trending, this move towards early/absentee
- voting and whatnot. Voters, more and more, are
- having an experience that they enjoy at the polls.
- 16 And that's particularly significant coming out of
- 17 2012 when the conversation --
- What was the theme of 2012, does anyone
- remember? Every election kind of has a theme;
- this one had about seven. Does anyone remember
- the theme of 2012? Lines, right? Lines at the
- polls. There was an entire presidential

- 1 commission created to address lines at the polls,
- and what we see with this voter-centric approach
- is an attempt to address that to give voters an
- 4 experience that they enjoy and have confidence in.
- 5 So, here's the yang, and I know it's a
- 6 little bit hard to read, but I'll give you the
- 7 gist, and that is almost half of voters who
- 8 believe the 2016 election was fairly determined
- 9 still express some concern regarding the
- integrity, right? So, I think it was fair. I
- think it was -- but I do have some questions, and
- 12 those questions -- and then that's -- the pie
- charts here revolve around questions around fraud
- or hacking or rigging -- electronic security
- breach or hack impacted the vote counts. And so
- what this tells in the story is as nice of an
- experience as they had, as much confidence as they
- 18 may have in their own locality, voters still have
- 19 a lot of questions about the integrity and
- security of the process. And I think what that
- 21 challenges us as election officials to do is to
- hear that, to recognize that, and to ask ourselves

- 1 how we can address those concerns not only in, you
- 2 know, in a real sense of mitigating the threats
- 3 but then explain the process.
- 4 The beauty of the elections process is
- it is administered locally, and so those who run
- 6 elections are also in voters' PTAs, are also
- 7 parents on each other's soccer teams, and so they
- 8 can engage. And so one of the things that I saw
- 9 election officials do in 2016 that I think will
- 10 continue is educating voters about how they can
- get involved in the process -- and not just being
- 12 a poll worker, although that's ideal because the
- you all get something out of it, too, but
- opportunities to watch pre-election testing,
- opportunities to engage as observers to watch vote
- 16 counts, post-election auditing opportunities, and
- witnessing. And so I think, more and more, if
- there's an election official that doesn't yet, you
- 19 all have to have that elevator card in your
- 20 pocket, that stump speech in your pocket about how
- you're securing the process, what steps you take,
- 22 and how to encourage voters to get involved,

- because having that readily available and the
- ability to explain it simply about the steps you
- 3 take to secure the process is going to be
- 4 critically important moving forward, because you
- 5 all have put a lot of time and thought into this.
- 6 You all have spent a lot of time thinking and
- 7 working to secure the process, and now it's
- 8 incumbent on all of us to talk about the steps you
- <sup>9</sup> take in order to give voters that confidence
- 10 moving forward.
- So, what is the future? All of this is
- nice; what do I see as the future? Well, the
- 13 first is flexible configurable systems. And we
- talked about it a little bit already. You're
- going to see, more and more, I think, the use of
- 16 commercial off-the-shelf products. You're going
- to see the use of systems that can be integrated
- 18 together seamlessly in order to better serve
- 19 voters. And that includes using data
- 20 compatibility or sharing.
- So, one of the things that happened
- 22 after HAVA in the purchase of new voting systems

- is that many election officials bought voting
- 2 systems and voter registration systems from the
- 3 same vendor thinking: Oh, this will be great;
- 4 they can share the same data, this will work. And
- 5 what they found is -- and, really, not through
- 6 fault of the vendor, which sounds funny -- the
- 7 data coming out of the voter registration system
- 8 wouldn't go into the voting system without having
- 9 to spend significant either time or money to make
- them work together.
- So, one of the efforts that's underway
- is a common data format for election systems so
- that you could issue reports out of a voter
- 14 registration system that can be loaded into e-poll
- books automatically, or the voting system, where
- auditing of election logs from the voting system
- 17 -- and that will allow for election officials in
- the future, not next year or next week, to mix and
- 19 match components of voting systems.
- So, in theory, moving forward in the
- future, you would be able to purchase the best
- scanner that you want to go with the best election

- management system that you want to go with the
- best e-poll book that you want and the data will
- 3 be exchanged in a way that allows those to work
- 4 together. But we are a little ways away from that
- 5 until that data format can be used, tested, and
- 6 implemented. But I think it's significant as you
- 7 look at the development of the next version of
- 8 voting systems.
- There's a greater demand on election
- officials as system integrators. If you want that
- mix-and-match future, the reality is you all, at
- the local level in particular, will have to know
- 13 how to test those systems to ensure they work well
- together. All of us want to believe you could
- just plug the printer in or hook up to the printer
- and it'll work. Many of us have experienced the
- hour to an hour and a half infuriating frustration
- of it not printing because it won't connect,
- 19 right? And so that's going to be the challenge as
- you try to integrate these systems together.
- There's going to be a greater focus on
- the voting experience. I think I've already

- 1 covered that a lot. There's a lot of conversation
- 2 around really understanding how voters want to
- 3 vote -- Colorado, LA county, a bunch of states --
- 4 looking at how to address that.
- 5 Universal design for accessibility. So,
- 6 I talked a lot about security and, I think, with
- 7 good reason. But making sure that the process is
- 8 open and available for all voters, including
- 9 military and overseas voters -- so absentee voters
- and voters with disabilities -- is not only
- important but it's required by law and the right
- thing to do, and so I think more and more you're
- going to see things like ballot delivery to voters
- with disabilities happen, because that allows
- voters with disabilities to use their own devices
- to mark those ballots, and the best way to make it
- accessible is to allow voters to use technology
- that they're familiar with at least to mark and
- 19 verify that ballot. So, then there's a question
- which goes into one of the next one's is
- increasing the auditability. So, if you're going
- to allow voters to interact with the ballot in a

- 1 variety of ways, how do we ensure that the systems
- 2 are auditable? And the purpose of an audit is to
- 3 ensure that the outcome of the election can be
- 4 confirmed.
- 5 Someone said one time that it's to
- 6 convince the loser that they lost. I actually
- 7 disagree. That's a nice thought, but it's to give
- 8 confidence, right? It's to be able to say with
- 9 confidence that the results are correct, and that
- auditability and accessibility are the linchpin of
- the future of election technology. The systems
- 12 are going to have to be auditable. You are going
- to have to be able to show how you audited them,
- but they're going to have to be accessible. They
- have to be able to be available to voters and used
- by voters.
- So, a lot of people, I think, think of
- 18 that as the yin and the yang: How do we give this
- 19 voter-centric experience while still maintaining
- security? I actually think that in a lot of ways
- they work in conjunction with each other. A
- 22 system that's inaccessible -- a system that can't

- be used by every voter -- is an insecure system.
- You're blocking people from voting, which is the
- <sup>3</sup> equivalent of denying service to them, right? And
- 4 so ensuring that accessibility with auditability I
- 5 think is key.
- And then sustainability. One of the
- 7 lessons learned from the HAVA systems is states
- 8 and locals were told: Go out and buy these
- 9 systems; we're going to give you a bunch of money,
- 10 go get yourself hooked on these systems. And then
- that money was gone and they had 10-year-old
- systems and they're left saying: What do I do?
- 13 How do I replace these systems? Ten years in the
- 14 information technology world is eons, right? And
- so in many states -- not here in Maryland -- in
- many states they're using systems that were
- deployed three years before the first iPhone --
- 18 right? -- 2002, 2004. That, for information
- technology, is old, and their systems have served
- them well, but moving forward as we look at
- 21 election systems, I think states and counties
- realize they can't be replacing their voting

- 1 systems every three, five, seven years. There's
- 2 no money to do so.
- So, what are some approaches to make
- 4 these systems more sustainable? Again, using some
- 5 commercial off-the-shelf products or otherwise
- 6 that you can swap out older technology for new and
- <sup>7</sup> still continue to run elections. So, that --
- 8 those are the principles I think that are going to
- <sup>9</sup> quide the future of technology in elections and
- building that security into the system. Any piece
- of election technology now that's being designed,
- built, and tested is going to have to demonstrate
- that security was built from the beginning --
- built into it from the beginning, not an after
- thought.
- So, what are the implications to you all
- of that approach? One is that you're having to
- 18 manage all the systems that were on that slide
- 19 before, right? You all are the complex IT system
- 20 managers. You cannot push that to a vendor. The
- 21 expectation is you all are managing those. You
- 22 are risk analyzers, and the good news is you do

- that already. It's just applying that to IT
- 2 systems.
- So, you're going to have to evaluate
- 4 current and future systems that -- to your
- 5 operating environment. The challenge for you is
- 6 going to not only be how do we do things now but
- 7 how do I anticipate things are going to change
- 8 either in law and procedure or in process that
- 9 impacts the technology that I need for my office?
- And so that anticipation, that ability
- to kind of look towards the trends in the future,
- is going to be important as you look to buy new
- 13 systems that you can build into your contracts and
- 14 get systems that serve you.
- Education on the challenges and needs of
- election officials and then protecting the data,
- ensuring not only that you are taking the steps to
- 18 protect the data but that you can demonstrate that
- 19 you protected the data and show it. And that's
- going to be critically important moving forward,
- 21 because at -- there was a quote recently in a News
- 22 Times article where an advocate for voters said,

- 1 you know, there's no information that shows that
- the systems were hacked, but there's also no
- information that shows the systems weren't hacked.
- 4 And so that's -- you all are being asked to prove
- 5 the negative in that case, right? And so
- 6 embracing the transparency of the process as well
- 7 as being able to explain and show how you manage
- 8 data integrity is going to be critically
- 9 important.
- And then, finally, embracing the fact
- that every election is a pilot, and by that I mean
- that every election we learn something new; every
- election something goes wrong, right? Where there
- 14 are lessons learned -- and so being able to take
- those lessons learned, adapted, and approved is
- going to be important particularly as we deploy
- more and more technology in an attempt to serve
- 18 voters in new ways.
- No election official that I know of ever
- rests on their laurels and goes: Well, we got it
- down. We got this. It's perfect, right? So,
- it's going to be a challenge to all of us to look

- at the systems and ask ourselves: What did we
- learn about them? How did we improve?
- So, one of the big recommendations that
- 4 I've had coming out of this election is that every
- 5 election office needs to be going back and looking
- 6 at all their policies and procedures with a lens
- 7 towards security: Have you updated your
- 8 chain-of-custody procedures? And if so, how?
- 9 Have you updated your access control procedures?
- Who has access to what data, and is it the amount
- of access that they need? Have you updated your
- password procedures in your office? Do you use
- things like two-factor authentication, or do you
- 14 know what that is and how that could help your
- 15 office?
- I also, as I've talked to election
- officials, have encouraged them to really push
- 18 back and ask tough questions of their vendors
- 19 about how they secure and what security
- procedures, because you're going to have to
- 21 explain that.
- 22 And then having incident response plans.

- 1 That's the other huge one, so all of you have
- contingency of operations plans. All of you have
- 3 thought through okay, if there's no electricity or
- 4 if there's a big storm or if one of my polling
- 5 places catches fire. But have you thought about
- 6 if I receive a ransomware attack and I cannot
- 7 access my voter registration database. It's taken
- 8 away from me. Do I have a way to either rebuild
- 9 it or recover from that, and what is that plan?
- 10 So, having an incident response plan that covers
- those contingencies from an IT standpoint is going
- to be critical, your operation moving forward,
- because all of us are going to be impacted by a
- 14 cyber incident whether it's directly -- so, your
- office directly -- or another office that you rely
- on or the state or a vendor. All of us are going
- to be impacted by a cyber incident.
- I was reading, before I came over here,
- that one of the largest providers of identity
- theft protection was -- just had 100+ million
- records stolen from them. So, even the people
- that protect data are having challenges. It's

- just a reality, and part of our reality now as IT
- 2 system providers that are having to secure systems
- 3 is recognizing that incidents are going to happen.
- 4 They're going to happen, and we need to be
- 5 prepared with responses. And the good news for
- 6 election officials is you already do that; you
- 7 already think that way. It's just applying it to
- 8 your cyber capabilities.
- 9 That's what I've got. Am I on time?
- 10 CHAIR NEUMAN: You're good.
- MR. MASTERSON: I'm good. I didn't even
- see the giant clock in front of me. (Laughter) I
- would love questions if we have time for
- 14 questions.
- Okay, first, Jessica. I would love
- Jessica to talk is what I would love, as I'm sure
- you all would. (Laughter) Thank you. (Applause)
- 18 CHAIR NEUMAN: That's okay. We thank
- 19 Mr. Masterson for giving us lots of food for
- 20 thought. Our tummies are full, and are minds are
- full, and we'll take questions and comments later.
- He gave us lots to think about.

- Next we'll hear from Montgomery County,
- 2 Board of Elections, Voter Service Manager Jessica
- White. You wondered who was this lovely lady
- 4 sitting up front. Well, this is who she is.
- 5 She has more than 14 years' experience
- 6 in local government and worked six years at the
- Johnson County Kansas Election Office, most
- 8 recently as assistant commissioner. With 40
- 9 elections conducted during 6 years, her
- 10 responsibilities included recruitment and
- scheduling of more than 2000 election workers,
- selecting and contracting 200 polling places,
- developing cost analysis from mail ballot and
- 14 municipal elections, procurement, and the
- management of a \$5M annual budget. She's going to
- share with us her views on vote-by-mail, and then,
- of course, any questions you have.
- Jessica.
- MS. WHITE: Well, hello, and thank you
- for the great introduction. I am Jessica White,
- the voter services manager for Montgomery County,
- 22 and I'm going to dive into vote-by- mail, which

- 1 Matt did a good job of covering some of the
- pieces, so that will kind of play nicely and we
- 3 can skip over some information.
- I am going to start with just kind of
- 5 some common questions and then a little bit of a
- 6 state-level, like a really high-level overview,
- 7 and then kind of get down into the municipal side
- 8 based on my experience working in the state of
- 9 Kansas where mail-ballot elections were allowed to
- be held for special elections.
- So, we'll start off -- just a little bit
- of overview, which Matt kind of covered.
- 13 (Technical interruption 00:28:16 --
- possibly microphone problems)
- MS. WHITE: So, just to kind of go a
- little bit on what Matt was going through, there
- are at least 22 states, including Maryland, that
- 18 currently have provision to allow elections to be
- 19 held by mail for, you know, different
- 20 circumstances. Four states, though, have enacted
- laws or already undertake full-mail ballot
- elections for any level of elections they hold,

- which is Oregon, Washington, Colorado, and
- 2 soon-to-be California. For mail-out elections,
- 3 every registered voter is automatically mailed a
- 4 ballot out, and that's usually 21 to 30 days prior
- 5 to the election. And then they can return their
- 6 completed ballots. Of course, that's designated
- 7 drop centers or by the mail.
- 8 (Technical interruption)
- 9 MS. WHITE: So, this is a little, just
- 10 kind of background of the difference between
- absentee balloting and actual vote-by-mail. So,
- people often refer to vote-by-mail as absentee
- ballots for everyone, but of course the biggest
- difference with absentee balloting is that they
- are request based. So, those are -- when you're
- administering an election and you're setting up
- polling places, you're training election judges,
- you're also issuing absentee ballots. And you're
- doing it based on the request from the voters, so
- they're sending that in to you, you're processing
- it, and you're doing it all the way leading up to
- the actual election.

- On the federal election side, there are
- also requirements for military and overseas
- yoters, and they have to fill out a special type
- 4 of application submitted to the office. Those
- 5 ballots have to be mailed out 45 days before the
- 6 election and then also fill requests as we lead up
- <sup>7</sup> to the election.
- So, when you go to a vote-by-mail
- 9 system, all of that kind of gets wound into one
- 10 process, and all of the ballots are mailed all at
- once in a singular process.
- Most states that undertake this process
- have facilities to do it within their offices, but
- 14 many other states that do it only in special
- elections or other circumstances use vendors or
- other election experts that come in and actually
- handle the process from, you know, the entirety.
- So, some of the questions that often get
- 19 asked when jurisdictions are talking about and
- 20 considering the use of vote-by-mail are: Does it
- increase turnout? How does it cost compare? How
- difficult is it to administer elections by mail?

- 1 And what are some of the other issues that should
- be considered? And being that these are all very
- important questions, there really isn't a simple
- 4 answer across the board for, you know, all
- <sup>5</sup> jurisdictions.
- With over 7,000 election jurisdictions
- <sup>7</sup> in this country -- depending on size, scale,
- 8 scope, federal elections, state elections, and
- 9 municipal elections -- there are many different
- answers to that. And so there really -- you know,
- 11 it kind of depends, but being that most of the
- 12 people in this room are administering elections at
- a municipal level, it really does kind of fall
- 14 into the site of being something that's a very
- practical solution -- for instance, a lot of the
- administration questions that I think are often
- raised. So, I'm going to go over some examples of
- 18 turnout, again high at the state levels and then
- 19 back down to kind of illustrate that.
- So, there were some recent studies done
- 21 by the Government Accountability Office that
- looked at different studies of mail-ballot

- elections, and so they reviewed a little over
- 2 20-some elections and what they found, from that
- 3 graphic up there, was that some studies found that
- 4 turnout was increased by doing mail-ballot
- 5 elections; some studies found mixed; some found no
- 6 evidence at all; and others actually said there
- 7 was a decreased turnout -- which was kind of
- 8 curious, especially the decreased turnout piece,
- 9 because while we think about the effects and, you
- 10 know, it has to do with elections, why would
- 11 actually the method of which you administer it by
- mail decrease people's turnout?
- So, some of the findings that they
- 14 found, particularly in the state of California,
- were that there was the option for the
- 16 county-level elections to require voters who were
- in a precinct with less than 250 people to vote by
- mail only.
- Well, if you think about how other
- states have ruled out vote-by-mail -- you've heard
- 21 about it, right? -- you hear it on TV, you hear it
- in the news and the press, and if you can imagine

- what it's like living in those states, that
- information is communicated widely -- while what
- 3 they found in California was when those smaller
- 4 jurisdictions or the small precincts -- nobody was
- 5 really talking about it.
- So, the voters didn't really know what
- 7 was going on. They didn't know what they were
- 8 supposed to do. They didn't know why they weren't
- 9 going to their polling place. They didn't know
- what was happening. So, what they found is when
- they increased the amount of communication, it
- brought that level of participation back up to the
- same as the other voters who voted at the polling
- 14 places, and then over time they actually found the
- more they communicated there were no, you know,
- small precincts.
- This is kind of just a timeline of the
- implementation of the vote-by-mail systems across
- the U.S. So, Oregon was the first state in 1998.
- 20 They did find that the first three elections that
- they administered at the federal level did have a
- huge increase, some up to 15 percent. But they

- did find that after time that newness effect kind
- of wore off. That shiny, brand new thing, and
- people won't -- it was back to the same stable
- 4 amount as it had always been. But they did find
- 5 that there was still a lasting effect on these
- 6 sub-federal contests and special elections and the
- 7 municipal elections and lower-level government.
- People were still participating more readily,
- 9 because it was convenient. It was coming to their
- 10 home. It was their vote the way they want to
- vote; their way to participate.
- Washington State has found similar kinds
- of things. There have been some preliminary
- 14 studies that Washington State has actually had a
- 15 slight increase overall and that that has kind of
- hung on. But we don't have the amount of data
- still from Washington State that we do from Oregon
- 18 just because of the amount of time that they've
- been doing these other elections by mail.
- But it was important that these -- that
- 21 Matt pointed out about the Election Administrator
- Survey that goes out, because that's how most of

- these research studies are conducted. That
- information that's gathered at the federal level
- and put out there allows researchers a wealth of
- 4 information to be able to determine how people are
- 5 voting, what the method is, what systems and ways
- 6 people are undertaking.
- 7 And then of course in 2014 Colorado put
- 8 in place the hybrid system whether it was vote
- 9 centers, same-day registration, vote-by-mail.
- 10 They already had 74 percent voters who are
- 11 choosing to vote by the absentee method. That was
- similar in Oregon and Washington State, and that
- was the reason they went to those types of
- 14 systems. So, they were already experiencing a lot
- of people who were very familiar with that method.
- But there were studies done in other
- states, namely California, that were polling
- voters and asking them: What do you think about
- 19 voting by mail? And they found that voters who
- had only exclusively ever voted at polling places
- <sup>21</sup> -- about
- percent of them said they weren't

- interested. It didn't seem like a method they
- wanted to undertake, something that they were
- 3 interested in.
- So, you know, through this research
- 5 process they got people to try vote-by-mail. And
- 6 when they went back to them and did the poll
- 7 again, they found 77 percent of them wanted to it
- 8 again. That was really their method; they liked
- 9 it. They found it to be more convenient. They
- 10 found they didn't have to wait in line. They
- didn't have to go through these other hoops. So,
- they really did feel that that was a method that
- 13 helped them.
- No, I don't know what -- I'll just give
- 15 you the look.
- SPEAKER: All right.
- MS. WHITE: So, this is talking about
- Colorado, Washington, and Oregon. These are
- 19 turnout tables from previous elections over the
- years. As you can see, this compares the U.S.
- turnout in these major elections and then the
- individual states. And so in every case, the

- states were already beating the federal turnout
- level for the United States as a whole.
- But what I thought was most surprising
- 4 about this is -- especially if you look at Oregon
- 5 -- the amount of increase in turnout in the
- 6 gubernatorial elections, which tend to be far less
- 7 turnout than presidential elections and the like.
- 8 It really seemed to be something that was
- 9 impactful.
- And of course Colorado's on this list,
- and it has yet to be seen because theirs is so new
- to them, but they've also seen a 2 to 5 percent
- increase in the election in 2014, so I'm sure
- there will be a lot of good data coming out since
- 15 '16 to kind of bolster some of this.
- Hey, look, it worked (phonetic). Okay,
- so now we're going to get down to the
- municipal level. And what I brought are
- 19 some actual slides of turnouts from special
- 20 elections done by mail ballot, and all of them
- 21 from about 2010 down. I was part of the fun of
- 22 those elections.

- So, these are the mail ballot. Next are
- the special elections, and then there was a
- 3 regularly scheduled general election for
- 4 municipalities every year. In Kansas municipal
- <sup>5</sup> elections were administered at the county level.
- 6 Maryland -- I don't know if all of you know this
- 7 -- is very unique in the fact that the codes of
- 8 Maryland have given pretty open season to
- 9 municipalities to determine their own method for
- 10 how they conduct elections. It's very unique in
- the United States. I think it's fascinating, and
- it's, you know, part of some of the innovation and
- 13 growth and processes and changes and things. So
- 14 many things originate here in Maryland because of
- the uniqueness. But because it was administered
- at the county level in the other states that I was
- in, I have found this information to kind of
- share, you know, the background of this.
- So, looking at this chart, I'm going to
- highlight a few things. So, I've put little red
- 21 arrows next to the lowest turnout of a mail-ballot
- election, over about 10 years, and then also in

- that same timeframe the lowest turnout for a
- <sup>2</sup> special election at a polling place. So, as you
- 3 can see, the lowest mail-ballot turnout was 29.96
- 4 percent. The lowest turnout of course for a
- 5 special election in person was 11.18 percent.
- There is a lot of research that goes
- <sup>7</sup> into the special elections content to draw higher
- 8 turnout just in general just because people may
- 9 have special interest. It might be a contested
- 10 race. It might be a recall. It may be taxation
- or something to that effect. But I think this
- was, you know, kind of a good illustration. And
- 13 then if you look at the highest turnout of a
- 14 regularly scheduled municipal election, it was
- less than the lowest turnout mail-ballot election.
- And then this next graphic is kind of a
- zoom-in. And what it shows is this is one
- 18 particular municipality. These elections were
- 19 conducted about two years apart, and you can see
- that 11 percent and 23 percent, respective, and in
- 21 between that there was a mail-ballot election that
- 22 had almost a 35 percent turnout. These were all

- 1 special elections. They were all in the same
- 2 municipality. These were all the same voters.
- 3 (Inaudible) there were different things that tied
- 4 into (inaudible), I think the spring general
- <sup>5</sup> elections were for the replacement of --
- See, that's the wrong heading (re
- <sup>7</sup> slides). That special elections were for the
- 8 replacement of a
- 9 seat for somebody that had vacated in
- the city council. So, this just kind of gives an
- illustration of what can be seen as a possibility
- when you use mail ballot as a solution.
- On caveat that I'll cover later, but in
- 14 Kansas by law any election that is conducted
- entirely by mail, the postage for returning the
- ballot has to be prepaid. So, the municipality
- bores the cost for that. But it does -- there is
- 18 some indication, at least, that that is a factor
- that does generate turnout. There was a study
- done -- a pilot in Washington State -- and they
- 21 did find about a 10 percent increase in turnout
- when they did in a couple of small special

- elections for postage paid.
- 2 Again, it's hard to look at it and know
- 3 was it the election? Was it the candidates? Was
- 4 it -- what caused the turnout? But when you look
- 5 at, you know, these previous numbers of these huge
- 6 numbers of elections, you can see just across the
- 7 board special elections always drew larger crowds
- 8 than almost any other -- I mean, even the highest
- 9 turnout of a special election in the polling place
- was lower than the lowest turnout for vote by
- 11 mail.
- Then we get into cost. This is a
- question that often comes up. So, there are a
- 14 couple of drivers that go into the cost of
- $^{15}$  conducting elections at the municipal level. One
- of the highest costs often is election judges.
- 17 Recruitment and training can also be very labor
- 18 intensive, time intensive. Lots of man-hours and
- 19 staffing go into that, and I'm sure many of you
- share my sentiment in knowing that you've now
- trained the workforce. You've sent them off to
- the polls to conduct the election, and whatever

- happens is in their hands. And if so, that's, you
- 2 know, one of those things that come along with
- 3 that.
- When it comes to printing and mailing,
- 5 there is a lot of increased cost over polling
- 6 place selections from that standpoint. But
- 7 elections are an economy of scale. So, it's --
- 8 the more you do, the more you produce, the more
- 9 you print, the more you -- the more of a cost
- 10 break you get. To illustrate this is a little
- example of a vendor price sheet, and it's kind of
- 12 like comparable costs of elections for envelopes,
- provision envelopes, outgoing envelopes, and so
- 14 forth. And kind of what you can see illustrated
- is that the more you spend or the more you
- 16 purchase, the lower the price breaks are for --
- so, you're always buying absentee ballots; you're
- already mailing ballots; you're already, you know,
- incurring these costs. And so by sending out all
- of them out that way, although there is an overall
- higher cost, it decreases because of the volume.
- So, your per-piece cost is much, much lower.

- Additionally, you don't end up with the
- 2 amount of waste that is generally associated with
- 3 these new systems that we've gone to.
- Paper-based voting systems require you
- 5 to do an estimate of the amount of ballots you may
- 6 need for the election. When you're doing it with
- one ballot style, you have a little bit better
- 8 control over how many ballots you need. But you
- 9 still run into the issue with multiple polling
- 10 places, early voting, having enough supply. They
- 11 come back, they have to be destroyed. You
- typically are packing up and getting stuff ready
- for Election Day; you can't reuse the ballots that
- 14 are left over from early voting; and those kinds
- of things. Or you're in the situation where
- somebody's calling frantic because they're down to
- a certain amount of ballots that maybe in your
- mind seems like more than enough but the
- 19 supervising judge is really concerned they're not
- going to get through the day. And so now you're
- running around trying to get together that amount
- of ballots to kind of get out to those polling

- 1 places. So, those are some of the, you know, cost
- <sup>2</sup> drivers that go into the overall.
- And then from an equipment standpoint
- 4 side, because most of the municipalities in the
- 5 state of Maryland contract with the state, they
- 6 contract with their county office, they work with
- other agencies, they use kind of some of their own
- 8 things. Traditionally, when a county or a large
- 9 -- or a state would look into the cost of
- 10 conducting mail-ballot elections, they came from
- the vast history of having direct recorded
- equipment. So, you have voting machines that
- directly -- there's no paper cost. You own a
- 14 piece of equipment. HAVA bought it years and
- years ago. You take it out to the same polling
- place, you bring it back, and there's no direct
- 17 cost to using that same piece of equipment other
- 18 than some delivery and training types of things.
- But in today's world where we used the
- 20 paper-based systems and with municipalities that
- don't own equipment, there isn't that same allure
- to continue to use that equipment at no cost. So,

- that becomes another driver that makes it more
- 2 cost efficient. Also, there's no need for poll
- books or precinct scanners when you're working
- with those kinds of systems.
- 5 What I brought was an actual example of
- 6 those special elections and some of the cost.
- 7 Now, this is a very, very small jurisdiction, but
- 8 I think it kind of helps illustrate that while
- 9 looking at the two comparisons -- polling place on
- the right, vote-by-mail on the left -- you can see
- that the vote-by-mail of course was far more
- expensive. But when you look at the bottom, we
- have our registered voters -- almost 5,000 on the
- left and 1,200 on the right -- but the cost per
- 15 registered voter. So, if you conduct the
- vote-by-mail, it's \$2.36. On the other hand, you
- know, there's a polling place selection. It's
- \$3.93. So, when you boil it down to what you're
- 19 actually paying per registered voter -- and then
- when you look at the turnout of, you know, one
- election at 20 percent, the other election at
- percent, then you can also see the cost

- per return ballot and then what the overall
- <sup>2</sup> drivers are for those.
- And then the last kind of -- things get
- 4 into voter convenience things, like Matt talked
- 5 about. Drop boxes -- do you do the prepaid
- 6 postage? Signature verification comes in to
- question with security. You know, we can't ignore
- 8 the things that have been raised and things we see
- on the news -- questions about how do we protect
- the vote and ensure verification. While it's not
- 11 a law at the county level, or state in Maryland
- now, it's certainly something that can voluntarily
- be done. It's done in many other states.
- 14 Totally optional, but also something
- that kind of gives that piece of mind. Security
- experts find that mail-ballot elections -- it's
- very rare that there are fraudulent types of
- 18 activity. I can tell you, working in the
- 19 jurisdiction, that the largest mail-ballot
- 20 election I was part of we mailed out a little over
- 21 300,000 ballots, and a little over \$100,000 was
- returned. And the biggest, signature verification

- issue that we encountered were husbands and wives
- 2 mixed up their ballots. And so one signed for the
- other, and they were swapped.
- 4 And we could remedy that. We could
- 5 contact them, have them come in, have them fix
- 6 those -- you know, sign the right ones, and get
- 7 them flipped. Yes, there are incidents where a
- 8 son's away from college, and Mom fills out his
- 9 ballot and signs it and sends it in. Those things
- do happen. But typically it's not somebody trying
- to gather up a large amount of ballots and mail
- 12 them or take over.
- And then the other piece that Matt was
- 14 also talking about was the in-person voting. That
- is a solution for voters in states that do mail
- ballot exclusively. Oregon and Washington do set
- up, typically at their county courthouse federal
- offices, in-person voting mainly for voters who
- 19 are disabled. So, it's a method for them to come
- in and be able to be assisted or use assisted
- 21 technology.
- Maryland, years ago, at the county level

1	launched online-ballot delivery, and there was a
2	there's an online- ballot wizard that voters
3	can use to complete their ballots at home, and
4	that technology allows the voters to use their
5	(inaudible) technologies or their
6	other adapted devices and their own
7	equipment to be able to complete a
8	ballot in an acceptable manner in
9	the privacy of their own home. And
10	it's been extremely popular by
11	voters in Maryland. They've really
12	taken to the technology. They
13	already know their own equipment,
14	their own things. We certainly, of
15	course, have accessible equipment
16	at the polling places, and it's
17	readily available. It's, you know,
18	fairly easy to manipulate. It's a
19	lot of input from the disabled
20	community in getting that equipment
21	put together. But we don't see as
22	many voters using it. They tend to

1	like to bring somebody, have
2	somebody assist them in the
3	process, do things that they're
4	familiar with. Maryland at this
5	time doesn't use adaptive
6	technologies on, like, smart
7	phones, but the system does have
8	that capability. So, those are
9	some of the things though that are
10	consideration points for voters,
11	you know, when looking at doing all
12	by mail.
13	And then some of the other
14	considerations I kind of covered some: Postal
15	reliability becomes the question. This is
16	something that has vastly improved. There have
17	been postal delivery issues. The Post Office has
18	changed some of their service delivery timeframes
19	that have impacted voters. But I can tell you
20	this last election and the collaboration with the
21	Postal Service to efficiently so, now, we send
22	out 68,000 absentee ballots. You know, the ones

- that were returned to us were returned to us
- because the address wasn't up to date or other
- pieces of information, but it was relatively
- 4 small.
- 5 Our jurisdiction actually had an
- 6 incident where some valid templates that were
- 7 mapped for overseas voters were inadvertently
- 8 used, and they were example pieces, and so they
- 9 were coded anywhere in Maryland 0000 Montgomery
- 10 County Board of Elections. And somehow the Post
- 11 Office figured out how to route those to us.
- Unfortunately, they were being used by voters all
- over the country, so we were getting ballots from
- 14 all over the country. So, the Post Office,
- working with the FVAP, with the Department of
- Defense for Overseas Voters, devised a really -- I
- mean, we sat on a conference call and in an hour
- they put together a system where they
- 19 special-label overnighted them back to the voter,
- told them what happened, gave them the right forms
- to correct it, and got those ballots turned around
- 22 and back to the right places in time for the

- <sup>1</sup> election.
- It was amazing to me that they
- 3 (inaudible) in what they could do -- on a few
- 4 occasions called, had ballots tracked at the Post
- 5 Office in the equipment somewhere, pulled them
- out, found them, rescued them. But ballot
- 7 tracking really becomes a great tool now that
- 8 we've gone to intelligent-mail barcode. It's a
- <sup>9</sup> free service. It's included with the
- intelligent-mail barcode service, so it's
- 11 something that can readily be used. Great
- technological advance that wasn't there prior that
- 13 now certainly is at play.
- I talked a little bit about the security
- (inaudible), and then of course
- this California study and the
- voters' resistance to change until
- they actually did it.
- And then the last piece is
- 20 disqualification due to voter error filling out
- the envelope. In my old jurisdiction, this
- 22 actually was quite an issue. Voters were required

- to write their address on the back of the absentee
- 2 envelope -- or an all-mail ballot envelope. But
- it was already printed on there. And so of course
- 4 voters were, like, I don't need to do that. Well,
- 5 that was an automatic disqualification. And it
- 6 took legislative change and a lot of lessons to
- 7 say that, you know, probably just make it easy,
- 8 have them sign it. That should be the
- 9 requirement. Introduce it back in the mail
- stream. Make sure it gets postmarked, and then
- 11 everybody completes -- gets their ballots back to
- 12 the office and counted and --
- So, that's just some of the
- consideration points, some of the information and
- background on all-mail ballot elections.
- 16 CHAIR NEUMAN: We thank Jessica for
- sharing her experiences, and before we go into
- 18 Open Session I want to encourage you to complete
- and submit the evaluation form that you received
- 20 in your materials.
- And now we're going to open it up to you
- 22 all. So, if you have comments, questions, you'll

- have a microphone, find a microphone, shift it
- over, and indicate your name, your position, and
- 3 to whom you address your comment or question. So,
- 4 I open it up to all of you. Go ahead.
- MR. ROBSON: I was first, I'll be first
- 6 (laughter) -
- 7 CHAIR NEUMAN: Go ahead. Go ahead.
- MR. ROBSON: I have two questions, one
- on the mail type thing. I heard some things which
- 10 I'm confused about -- and I don't hear too well,
- 11 so.
- There was some emphasis on the fact that
- out there I quess in the all-mail states they like
- to ride their bicycles and throw them in the box.
- Now, in most states, do they prepay the return
- ballots, or are they saving half a buck by riding
- their bike to drop it off? That's -- because I'm
- 18 just curious about the number of people who
- actually would come in. Would it go up or down if
- 20 they were prepaid? And that was -- it also
- 21 applies to Jessica's question.
- MR. MASTERSON: Yup.

- MR. ROBSON: In the Overland example --
- 2 I saw those around 3K for postage, but was that
- <sup>3</sup> return postage?
- 4 And the other question is how do they
- 5 mail them out? Is it first class? Is it ninth
- 6 class? Is it -- you know, how do you know what's
- 7 going on?
- MS. WHITE: Okay, so -- I'll take that.
- 9 In the other states, widely postage paid return is
- not used. But they did do a pilot in
- 11 Washington State last year, and they are planning
- to continue to pilot it and see if it has a
- mechanism. But, as Matt said in his presentation,
- voters like to bring their ballots in. Washington
- 15 State, Oregon -- they set up drops all over the
- place for voters. They have -- like the library
- book returns, they have boxes set up. They have
- 18 them in Supermarkets. They have them at
- 19 libraries. I mean, they have them all over. If a
- voter is somewhere and they want to make sure that
- 21 ballot gets in -- because one of the things that
- 22 -- another kind of issue that comes up -- they

- said when you mail somebody a ballot they think
- they have all the time in the world, and they kind
- of hold onto it.
- 4 MR. ROBSON: So, is the previous a
- 5 prepaid what they call dekia ie (phonetic)? You
- 6 don't pay it till you get there?
- 7 MS. WHITE: Right.
- MR. ROBSON: Okay.
- 9 MS. WHITE: So, there are two methods.
- You could either apply a stamp or you could use a
- business reply account. My jurisdiction used
- business reply, and so you did just pay upon what
- 13 actually was received back.
- MR. MASTERSON: Just quickly, I think
- addressing your second question -- I'm trying to
- 16 remember what it was. I get confused easily, yes.
- MR. ROBSON: Well, is the -- I asked
- about the turnout and the prepaid at the Rosedale
- example, and was there a higher turnout if there
- $^{20}$  was no prepaid is really what the question was.
- MR. MASTERSON: Yeah.
- MS. WHITE: So -- yes, they find that,

- you know, in the states Oregon and Washington,
- they already had very high turnout at that time.
- 3 Turnout continued, but they did find about a 10
- 4 percent increase in turnout in the special
- <sup>5</sup> elections that they did the pilots for. There
- 6 were two special elections for municipalities
- <sup>7</sup> (inaudible) Washington.
- 8 MR. ROBSON: It's more of a
- 9 semi-political question as opposed to an
- administrative question. It cost \$11,000 in the
- 11 Rosedale example to get back -- the cost per voter
- was less, but the cost of the election was more
- than twice as much, so -- if I remember the
- 14 numbers. It's a little hard for me to see the
- 15 screen as well.
- So, College Park is kind of unique,
- because we have 18,000 voters. Around 5,000 are
- students who disappear every four years or every
- two years of our election cycle. So, if we're
- 20 mailing these things out -- and we calculated it
- once -- it's about a buck and a half for postage
- to send them out with the suitable envelopes.

- 1 You've got this envelope, that envelope, and the
- other -- all stuffed in one -- and they're
- oversized. Right now that's -- so, we'll be
- 4 spending \$20,000 of which \$6,000 will be going to
- 5 the students. And we want the students to vote --
- 6 don't misunderstand -- but a lot of them do not.
- 7 So --
- 8 MS. WHITE: Having a good relationship
- 9 with your mail house is --
- MR. ROBSON: I'm sorry?
- MS. WHITE: Having a good relationship
- with your mail house, your mail vendor, is a good
- solution. You can actually get your ballot cost
- down to about 35 cents a ballot for first-class
- mail. So, first-class mail is important. That
- 16 comes with standard services.
- MR. ROBSON: That's a presorted kind of
- 18 stuff?
- MS. WHITE: No, first class is regular
- full service, like, you put a stamp on the front
- of it. But even though it's a 44 cent
- transaction, if you work with a mail house, they

- can do different processes: CASS certification,
- 2 address correction. They make sure that it's
- 3 suitable to be mailed. They put them in carrier
- 4 sort order. All these things end up with a
- 5 discount in the postal rate for you.
- So -- and being from a jurisdiction,
- 7 like I said, in Kansas and in Maryland, but the
- 8 last election in Kansas we mailed out 77,000
- 9 ballots before the presidential election in '12 by
- absentee, and we got our costs way down. I mean,
- 11 you can really --
- MR. ROBSON: What was the size of the
- ballot envelope that went out?
- MS. WHITE: For that election, we -- and
- 15 I can --
- MR. ROBSON: A No. 10 standard size?
- MS. WHITE: You can (inaudible) No. 10.
- MR. ROBSON: So, you must have really
- 19 rolled them over, I mean, because in our process,
- it has to come -- well, you mentioned it. The
- 21 special envelope wasn't signed so you disqualified
- him, because it has to come back in a sealed

- 1 envelope.
- MS. WHITE: Right.
- MR. ROBSON: So, there are two envelopes
- 4 that have to be mailed.
- MS. WHITE: Right.
- 6 MR. ROBSON: Plus the ballot.
- MS. WHITE: A 9 and a 10.
- MR. ROBSON: It weighs a lot more when
- 9 we -- we would think about going -- we have -- we
- do not have no-excuse absentees. So, we were --
- this counsel was considering going to no-excuse
- absentee, and we were asked to evaluate the cost,
- and it ended up, like, \$28 a ballot with a staff
- 14 required to process the --
- MS. WHITE: Oh, wow.
- MR. ROBSON: -- to process the absentee
- ballots to make sure they're good voters; to put
- them in the envelopes; to mail them back; bring
- them back, go through the special control process
- to make sure we're not getting back ballots we
- 21 didn't send out. It was a lot of time and a lot
- of postage. And that's we worked out it would

- 1 cost in our fair city. And so it may sound like a
- lot, but that's what we did, and that's why I'm
- 3 asking these questions so I thought.
- 4 MS. WHITE: And I think some of that is
- 5 the difficulty, and that was always kind of this
- 6 yin and yang -- the poll we had. If you do
- 7 polling place elections and you mail ballots --
- 8 you do both -- it's difficult to do both at the
- 9 same time. There's -- it's competing. You're
- trying to look the voters up. You're trying to
- get the ballots back in. You're trying to get the
- 12 ballots back in. You're trying to prepare them to
- go out. You're trying to manage all these forces.
- 14 At the same time, you're trying to get polling
- places, election judges, and those kinds of
- 16 things. And I said it -- from having the
- equipment in-house to do it, it's like you need
- 18 the Bat Cave. You need to hit the button and the
- 19 floor flips over and now you have a whole
- different voting system, because it's not even
- 21 alike systems and, you know, I could bore you for
- days with pictures. I even have a little clip of

- the jet engine scanning device and how
- <sup>2</sup> (inaudible).
- I can also show you a detailed cost
- 4 analysis of how -- but, again, this is
- 5 streamlining the process. It is going through and
- 6 doing a case study and, you know, because that's
- 7 how we ended up doing it -- is going down to other
- 8 jurisdictions, vote-by-mail states, and saying how
- 9 did you guys do this in an efficient manner?
- Because, even though we administered the elections
- 11 at the county level for the municipalities and
- they had to bore the cost, we couldn't just stick
- them with -- you know, it wasn't a blank check.
- 14 They weren't just saying do whatever you want and
- we'll pay the bill. So, we definitely got it down
- to a reasonable amount, and when we looked at cost
- comparison, we couldn't do a polling place
- election for those 5,000 people for that \$11,000.
- 19 That wasn't a feasible amount. I mean, just the
- 20 recruiting, judging.
- MR. ROBSON: Thank you.
- MS. WHITE: And I should include, too,

- those were direct costs, so that did not include
- our office staff labor hours in those estimates,
- 3 because we weren't allowed to bill those by law.
- 4 MR. MASTERSON: I'm just going to give a
- 5 cheap plug, and that is DAC created page
- 6 votebymail.gov) that has all the basics of
- 7 vote-by-mail: Some best practices, some
- 8 techniques that Jessica mentioned on working with
- 9 the Post Office. It includes personal service
- 10 resources. This last election the Postal Service
- 11 really committed to what -- They started talking
- 12 about that way and they viewed themselves as
- election officials in many places, and they did a
- heck of a job. And so there are a lot of
- resources on delivery times, cost savings, using
- 16 first-class mail is super important, stuff like
- that. They have a lot of election mail
- information that's linked to this, so.
- MS. REAMS: Laura Reams, City of
- Hyattsville. Thank you both for the presentation.
- <sup>21</sup> Very informative.
- 22 Another question on vote-by-mail. I was

- wondering if one of you guys could speak to the
- 2 signature verification process and just explain a
- little bit more about how that works.
- 4 MR. MASTERSON: Sure. So, I'll give
- 5 kind of general -- some general, and
- then I'm sure you could speak to exactly
- 7 how you did it. But it's going to depend a lot
- 8 on, obviously, state
- law. I know here in Maryland this is a
- 10 topic of discussion but it's not required now --
- 11 right? -- in looking at it.
- 12 It's done a variety of ways. In Oregon,
- they actually bring in FBI handwriting folks to do
- training with their election officials to do this.
- 15 In Colorado, in Washington they pursued similar
- things, but keep in mind, particularly in Oregon
- and Washington, this is how they vote. And so
- 18 committing those resources is part of their
- 19 security measures, literally.
- In other states that have vote-by-mail
- 21 -- in Ohio, for instance, we offer general
- guidance and techniques, but what's super

- 1 important, I think, in looking at the signature
- verification, is that the point is you're trying
- 3 to verify the person, but you're also not a
- 4 signature expert. And so having clear guidance to
- you all, your workers, about how to adjudicate, so
- 6 not just saying (inaudible) that's clearly not --
- 7 that "r" looks different, we're done with this.
- 8 Having really clear instructions just like you
- 9 would on determining voter intent or something
- 10 like that plays into the signature recognition,
- too, because you don't want people just winging it
- saying -- you know, playing Perry Mason with it.
- And so like in Colorado they have a
- series of adjudication steps, so one person or a
- bipartisan team can't just throw it out. It moves
- on to another step where someone else will look at
- and then eventually it's adjudicated. So,
- building in those layers as you do it ensures both
- the voters and franchise -- if they should be --
- but also a good review on the signatures if they
- don't match, because then, you know, you have
- possible fraud in play or whatever, so you really

- $^{1}$  want to get it right as best you can.
- MS. WHITE: And just to piggyback on
- everything you said, in Kansas we did have
- 4 signature verification. We did use bipartisan
- 5 teams. We did have them undergo training. We did
- 6 bring in experts from the FBI and other places to
- 7 do that. But another step that we took kind above
- 8 that was to send out signature cards. So, from
- 9 (inaudible) to signature didn't match or sometimes
- you have a signature from somebody that they've
- been registered for more years, or sometimes
- somebody develops some type of manual dexterity
- issue and you could just have a second chance to
- say hey, could you update this and get it back to
- us and let us know what the issue is?
- Any ballot that was rejected for the
- 17 reason of signature went to the Board of
- 18 Canvassers for examination, and they would pull
- the original signature card if we had it on file
- or a replica from the electronic system, and this
- 21 became kind of an issue with motor voter laws that
- went into place to allow people to register at the

- 1 MVAs, because getting that information transmitted
- 2 -- in Maryland it all comes over electronically,
- and we don't verify signatures in Maryland, but we
- 4 certainly use signatures in Maryland especially
- 5 when somebody calls and said: That wasn't me.
- 6 And we can pull it up and say: Was this you? Oh,
- 7 that was me. Okay, great. You know, we let them
- 8 verify some of those things. So, it is, you know,
- 9 kind of the basics of how that --
- MR. MASTERSON: Jessica made me think of
- one other thing, and that is in many of the states
- the vote-by-mail -- when reviewing signatures they
- don't just have the most recent signature
- available but a series of signatures over time so
- you can see a trend if there are developments of
- dexterity issues and whatnot, so that you're not
- just looking at one but a series of them, and they
- do a good job kind of working through that. So,
- 19 giving yourself as much information as possible
- when doing signature verification. But in the
- end, even with really good training, you all
- 22 aren't going to be handwriting analysts, right?

- 1 You're not going to be those experts. We'll add
- that to the list of things you do, though, right?
- MS. REAMS: Thank you both.
- MS. WHITE: And I will also add, too,
- 5 it's kind of - when -- you know, inevitably
- 6 mistakes happen. Sometimes voter records get
- 7 munched. Voters have common names. And it's
- 8 usually very distinct to tell what happened,
- 9 because you're flipping and looking at those back
- images, and you can see the one that doesn't look
- like the others, and then it becomes oh, this must
- be the piece that was, you know, accidentally --
- and that helps us to work in that way, too. So,
- even though we don't use signature verification,
- we do use it as a tool in doing our jobs.
- MR. WEINER: Stephen Weiner with the
- 17 City of Rockville. Would you speak a little bit
- 18 about security, physical security. If I'm
- dropping off my ballot at the Safeway checkout
- counter or the library, what's the chain of
- custody? How frequently are they picked up? Do
- we have to have security in each of these

- <sup>1</sup> facilities?
- MR. MASTERSON: Sure. It's a great
- question. As with everything in elections, when
- 4 you're talking on a larger scale, the answer is it
- 5 depends how it's done. So, it's going to depend
- state to state, county to county in some cases.
- 7 Typical practices that we see are some
- 8 sort of camera or security around; set drop boxes,
- 9 although I'll say in many of the vote-by-mail
- states, they'll put them in well- lit areas and
- 11 stores that already have cameras, so in the
- 12 grocery store typically you're going to have
- 13 perimeter cameras anyway, so they'll work to set
- them up in places that already have surveillance
- of some sort, obviously having good locks, keys,
- things like that. And then they pick up
- regularly. So, many of the locations will pick up
- multiple times during the day, and they make sure
- that they're cleared, you know, at the end of the
- 20 day for that.
- The other kind of physical security
- 22 challenge that I know many of them -- is putting

- them in places that someone can't just drive
- through them, right? Just run them over? And so
- 3 selecting locations that kind of guard against
- 4 those sorts of what would be a tax of sorts --
- 5 right? -- if someone chose to. And so, yeah, all
- of that physical security, chain of custody,
- 7 maintenance of those systems -- absolutely.
- 8 Just like you would with any other
- 9 ballots having that in place, having a good plan
- 10 for that is critically important, and it's kind of
- 11 -- Jessica mentioned it -- it's kind of cool now
- with the intelligent mail barcode that the Post
- Office offers. You can chain of custody the
- 14 ballot through the Postal Service now. So,
- providing voters -- you know, we've created your
- ballot, we've mailed you your ballot, your ballot
- is here in the mail process. Now we see the
- 18 ballot is back being returned to us. We've got it
- 19 at the processing center. We've, you know,
- scanned your ballot and your ballot's been
- 21 counted. Literally, jurisdictions that do
- vote-by-mail will offer that kind of Zappos-like

- experience -- right? -- where voters can sit there
- and go: Holy smokes, I can see exactly where my
- 3 ballot is. And so it's pretty neat the level of
- 4 detail and information that can be provided, and I
- 5 know the election officials that administer
- ovote-by-mail ballots -- one of the things they
- 7 love because either secretly or not secretly, all
- 8 of you are intense control freaks, because every
- 9 election official is -- the amount of control they
- 10 feel they have over the process in vote-by-mail
- they love. They aren't relying on poll workers or
- 12 anyone else. They can control it working with the
- 13 Postal Service.
- MR. JOHNSON: Graham Johnson, City of
- 15 Rockville, Board of Elections.
- Talk about being control freaks, I was
- 17 -- my question I had in mind deals with the use of
- 18 commercial off- the-shelf software, COT software.
- 19 Concerns I've had, not elections, but with
- financial systems, are what do people do - what
- could people be planting in that off-the-shelf
- software and how to guard against those concerns.

- 1 While you do your own, you can -- you like to
- think you can better control that environment
- there. So, what are the security measures taken
- 4 with respect to ensuring commercial off-the-shelf
- 5 software is doing exactly what you think it should
- 6 be doing?
- 7 MR. MASTERSON: Yeah, that's actually a
- 8 super common concern that I've heard from election
- 9 officials, particularly with regard (inaudible),
- so most of the time when we're talking about COTS,
- 11 you're talking about hardware. The software
- you're going to probably get from some election
- vendor of some sort, right? But you still have
- 14 firmware on their, right? And it's still running
- an operating system and otherwise, and so that's a
- common concern that I've heard.
- And two ways that folks try to deal with
- that. One is understanding and trying to purchase
- 19 COTS systems that are widely used, so part of the
- 20 advantage of COTS is that you can buy something
- that millions and millions of people use. And so
- there's a level of assurance there. And then also

- buying - and I know at least one jurisdiction
- buying military-grade COTS. So, it's COTS but
- 3 they're buying an extra level of it, and so there
- 4 are certain assurances that they find with that -
- 5 and then, you know, testing the heck out of it,
- 6 evaluating it. But the reality is if you're
- buying an Apple iPad, you're not going to have the
- 8 ability to do any kind of full source code review
- 9 or whatnot, but it's also a widely used
- 10 (inaudible). So, you assume some
- risk with that there, and the
- assumption is that the marketplace
- has sorted through that in the form
- of the COTS that's being provided.
- But it is a risk that you take with
- it. No question.
- I'll say also I think some of the folks
- in the security community would say that there's
- 19 no assurance that proprietary purchased software
- and hardware don't have some of that same concern
- 21 -- right? -- and something loaded on there as
- well, and that's why you do reviews and scans and

- code review and whatnot.
- MS. WHITE: And I would just add to his
- 3 comment by saying you can never underestimate an
- 4 election judge on a slow day.
- MR. ROBSON: If somebody hasn't asked
- 6 I'll sit back.
- 7 CHAIR NEUMAN: Okay.
- MS. RAU: Hi, I'm Kim Rau from the City
- 9 of Laurel. We have about 13,000 registered
- voters, and we only
- get about 2,000 votes in an election.
- 12 The vote-by-mail -- I have a question with the
- barcode you were talking about through the Post
- 14 Office. Would that be something that would be
- available to us as a small -- and would you
- recommend that for maybe only 50 absentee ballots?
- 17 Is that something --
- MS. WHITE: Yes, it's absolutely
- 19 available. In fact, it's recommended -- and
- required in some instances -- by the Post Office.
- 21 So, yes, it would be a great tool.
- There's also a program through Democracy

- 1 Works. It's called Ballot Track, and they work
- with election officials to set up and track
- 3 ballots. And just like Matt was saying, it's an
- 4 end-to-end product where it tracks a ballot all
- 5 the way through the process and all the way back.
- 6 And, actually, even if you have a small amount of
- 5 ballots that's great scalable project, because you
- 8 have to apply unique barcodes to outbound and also
- <sup>9</sup> the return envelope, which any mass printer
- 10 readily can do. But even if you're doing it in-
- 11 house you can have software downloaded that
- 12 generates that barcode.
- But I really do recommend Ballot Track
- 14 as a great process. They work -- it's low cost.
- 15 It's something developed for election officials.
- 16 That's really what their drive and purpose is.
- So, they're not for profit, but it is a way that
- 18 -- they already have readily available software
- 19 for that. But it is something you can do through
- <sup>20</sup> a mailer, too.
- MS. RAU: Thank you.
- MR. SNYDER: I'm Paul Snyder, City of

- 1 Gaithersburg. Mr. Masterson, did you -- does the
- <sup>2</sup> EAC have
- guidelines? Because you were talking
- 4 about audibility of running elections without
- 5 paper records and being able to -- because I come
- from a background where I work for a federal
- 7 agency that investigated union elections, and
- 8 whenever we were asked questions about, you know,
- 9 could they give us guidelines regarding running an
- election without paper, essentially we could not
- 11 give them guidelines for providing a nonpaper
- 12 election. And there are some unions where the
- nature of the union is that they're very mobile,
- like airline pilots, and so they would want to
- run, like, a phone election or, you know, just be
- able to check it off on their computer. And yet
- we required that we be able to go behind, get the
- 18 source codes, get the information and couldn't
- ensure the -- we couldn't sufficiently investigate
- $^{20}$  the election without having a paper record. So,
- has the EAC provided guidelines regarding running
- 22 elections without paper?

- MR. MASTERSON: Yeah, that's an awesome
- 2 question and one I should have plugged and you
- just reminded me.
- We do. Our guidelines development for
- 5 the voting system specifically is done with our
- 6 partners at NIST out there in Gaithersburg. So,
- 7 we work directly with NIST and the NIST scientists
- 8 on doing it.
- So, I think, one, the scientific
- 10 community, including -- I think folks in NIST
- would tell you there's no true way to audit a
- 12 system without some sort of -- whether it be paper
- or -- now there's a development of what's called
- end- to-end or E2E systems, but those aren't
- widely available yet. They're mostly academic
- research at this point. And so if the goal is to
- allow and to go back and count that physical
- 18 record to do it, I think scientists would tell you
- that the only true way to do that was to look at
- the paper record.
- With that said, there are techniques,
- and we have some information up as far as

- reviewing, doing pre-election 2 (inaudible) but then post-election 3 reviews of the votes against, you know, the digital record. 5 there's multiple redundancies 6 within the system that you could 7 check against. But in the end I 8 think what most have said is if 9 you're relying on some sort of 10 software to review it, you know, is
- So, the short answer is that we do have some guidelines that I can share with you afterwards around that, but I think if you're talking about auditing an election, generally the scientific community would tell you, though, the only way to do that is to review that ballot of record.

audibility.

that giving you the level of

MR. SNYDER: Thank you.

11

12

- MR. ROBSON: Nobody else? I want to
- 22 plug for your agency. You had indicated you

- didn't do e-ballot reviews. University of
- 2 Maryland -- they have incubators for this and
- incubators for that, and they like to start new
- 4 companies. Suppose some professors and students
- 5 decided to write software to do exactly what we
- 6 want: To take off-the-shelf machines and make it.
- 7 Couldn't you guys get your charter, or whatever
- 8 it's called, that established you changed to allow
- you to be an approving source for off-the-shelf
- scanners or whatever -- off-the-shelf scanners? I
- mean, because it sounds like it's coming and you
- would be the people to do it.
- MR. MASTERSON: Sure. So, we can test
- 14 and certify that now. And as a matter of fact --
- MR. ROBSON: question you didn't do
- anything but systems.
- MR. MASTERSON: We do voting -- well,
- it's a good one. So, we do voting systems. So,
- what would need to happen is that a manufacturer
- or creator -- I mean, we have a process in which
- you register and then submit the voting system to
- us to review. What we don't do yet, because of

- the lack of common data format, is certify
- individual components. So, we wouldn't certify
- just a scanner by itself. It has to be a scanner
- 4 with tabulation, ballot creation, stuff like that.
- 5 But there -- if it's a voting system, we will test
- 6 and certify it. We don't care what the hardware
- <sup>7</sup> is, for instance, or whatnot.
- 8 MR. ROBSON: Right, so I could bring you
- 9 a program run on a HP scanner, a Toshiba scanner,
- and a whatever -- it would run on them all because
- we design well -- and you would certify that it
- 12 runs good. (Laughter)
- MR. MASTERSON: As long as it met all of
- the requirements in our guidelines.
- MR. ROBSON: Oh, yeah, understood, but
- you do do that that.
- MR. MASTERSON: Sure. We'll -- as it's
- 18 a voting system in that way. And to be clear,
- 19 COTS is not a new concept in voting in that even
- the proprietary hardware systems use commercial
- off-the-shelf monitors, things like that, within
- their system. But it's surrounded or cased with

- proprietary hardware, so that high-speed scanner
- you saw -- the camera in that scanner can be
- purchased from a company, right? They don't
- 4 create it themselves, but it's within a
- <sup>5</sup> proprietary system.
- So, yeah, we -- I mean -- so, for
- 7 instance, the Denver system that we saw there that
- 8 has COTS products -- I would anticipate us testing
- 9 and certifying that voting system as it's
- 10 submitted to us in that way.
- MR. ROBSON: Just a comment on your
- 12 question about - I used to work for a company
- where we did work for those people that float
- 14 around this area, and when we did the work for
- them we would buy a new operating system, load it
- in the machine, and then remove it after whatever
- task we were doing was done and destroy the
- 18 operating system so that nothing could get written
- 19 to it, nothing would be changed, and it's a
- hundred bucks. So, from an electric point of view
- 21 -- and you can get a license so you can put it on
- five machines for \$300. So, the cost is minimal

- for an election. Not for us, that's a lot of
- money, but for an election it's nothing. And you
- 3 can be pretty sure if you buy it from Microsoft
- 4 you can buy it from Apple. There's no problem
- 5 when you first get it, and you're throwing it away
- 6 after the election -- or taking it home.
- 7 (Laughter)
- 8 MS. REAMS: Earlier you guys talked
- 9 about the voter experience a lot, which I think is
- very important. I'm wondering if on your travels
- 11 (inaudible) elections, you know, throughout the
- 12 country you showed that drive-through drop-off-
- like thing, which is great. I'm wondering if
- 14 you've seen any other ideas that maybe could be
- implemented at the level that are innovative like
- that that you could share.
- MR. MASTERSON: Oh, man, oh.
- MS. REAMS: (Inaudible)
- MR. MASTERSON: Do I?
- MS. REAMS: (Inaudible)
- MR. MASTERSON: Yeah.
- MS REAMS: (Inaudible)

- MR. MASTERSON: All right, that's a good
- point. All right, another point, too.
- The answer's yes, and you've challenged
- 4 me now to think off the top of my head, but
- 5 everywhere I go I see some best practices, simple
- 6 things to more complex things, that are -- the
- 7 sole purpose is to find ways to better serve
- 8 voters. And so coming out of 2012 on the line
- 9 management issues -- the long lines we saw a lot
- of looking at ways to move voters through lines
- 11 more efficiently.
- So, we have a lot of information,
- 13 actually -- tools and information -- up on our
- website on moving voters through lines quickly and
- also -- and so this is kind of a neat roundabout
- way of answering your question.
- The Presidential Commission on Election
- Administration that looked at long lines at the
- 19 polls -- one of the commissioners was from Disney,
- 20 and one of the things -- right, because there's
- lines at Disney -- but one of the things he talked
- 22 about that I know several election officials have

- embraced and kind of thought about is if you have
- lines, how do you make it so it doesn't feel like
- you're waiting in line?
- 4 And so Disney is real good at that,
- 5 right? Disney makes you feel like, one, you're
- 6 not waiting in line, you're in a show or whatever,
- 7 but they also -- and I never noticed this till he
- 8 brought it up -- you also don't see everyone else
- 9 waiting in line except for the people immediately
- in front of you. So, they wrap you around things
- 11 -- right? -- so you're not staring at a long line
- and feeling like: I'm going to be in this
- <sup>13</sup> forever.
- And so I've seen election officials --
- and this will sound silly, but they've had really
- 16 good success putting up selfie stations along the
- 17 lines so that folks can sit there and snap
- themselves with, you know, Thomas Jefferson or,
- 19 you know, whatever -- whatever they can think of
- 20 -- local celebrities or whatnot, or they've
- 21 created check-in points -- social media check-in
- points -- so you can, you know, hey, I'm waiting

- in line to vote -- and snap a picture on Instagram
- or whatnot and put it up. And so that's all part
- of the voter experience, now, is trying to embrace
- 4 and manage that. And it's simple. That's going
- 5 to cost them next to nothing to do it.
- Then there's technological advances, so
- 7 -- I mean, we talked about e-poll books, but the
- 8 ability for those e-poll books to scan a driver's
- 9 license to check folks in from an efficiency
- 10 standpoint -- and so now folks have looked at ways
- 11 to advance the process so that essentially you can
- move from the station where you check in, get your
- ballot, and vote sort of all in one step so that
- 14 you're not going station to station but you kind
- of just get issued it. And so there was even
- 16 conversation because of the use of the
- availability of mobile phone in marking your
- 18 ballot. Can you create almost an E-Z Pass line
- where they can check in, get scanned, go ahead and
- 20 zap it, look at their paper record, and drop it
- through.
- So -- man, I -- you have -- I'm going to

- 1 come back to you. I'm going to, like, I'm going
- to, like, scribble down some. Everywhere I go I
- 3 see different ways that election officials have
- 4 embraced this challenged of finding new ways. I
- 5 mean, it sounds silly but in many polling
- 6 locations there were no chairs, and just the
- 7 availability of seating for folks who struggled to
- 8 stand or -- it sounds so simple. Or there's
- 9 Seminole County, Florida. The election official
- down there is incredible, and he looked at parking
- 11 -- the amount of parking and the amount of left
- turns versus right turns you have to take to get
- into the various vote centers he set up because
- the ease at which someone can come in, park, and
- get out with using turns and whatnot impacted the
- voter experience for them, and so one of the
- things I'd encourage you all to do that is
- becoming -- and we have these up on our website --
- is it's becoming increasingly common for election
- officials to do customer service surveys of the
- voters: How was your experience? What did you
- like? What didn't you like? What could we do

- 1 better? What would you like to see? And some of
- this stuff is stuff you may not be able to do, but
- 3 some of the stuff should be: Oh, I never even
- 4 thought that is a service that we could provide.
- 5 The other thing is it has become an
- 6 expectation that you're answering five questions
- 7 for voters on your website and easily found, and
- 8 that is: Where do I vote? What am I voting on?
- 9 What's on my ballot, right? How do I vote? So,
- what's my experience going to be when I come in?
- What are the machines, whatnot? And am I
- 12 registered? So, I guess four -- so, if you don't
- have those -- those questions need to be answered
- directly within your website or if you have a
- mobile app or whatever. Those are the questions
- voters ask: Am I registered? What's on my
- 17 ballot? Where am I going to vote? And how am I
- going to be asked to do it?
- MR. ALBRIGHT: Bill Albright from
- Gaithersburg. Are the presentations available
- that could be sent out?
- MR. MASTERSON: Absolutely, yeah,

- 1 absolutely. I should ask you, are your reviews
- <sup>2</sup> available also so
- that I can reevaluate my presentation.
- 4 (Laughter) That would be awesome. I'd love that.
- 5 I like candid feedback.
- 6 SPEAKER: (Inaudible).
- 7 MR. MASTERSON: Yeah, I'm for it. My
- 8 day -- it can't be -- when I used to go talk in
- 9 Ohio -- well, with my counties -- they didn't hold
- back. So, election officials are nothing if not
- 11 candid. So, it makes us all better.
- MS. EVANS: Good question. Patricia
- Evans, Greenbelt.
- Jessica, when you showed the comparison,
- 15 I was wondering -- the mail -- did you use that
- big scanner that we had seen a picture of, or how
- did you guys count?
- MS. WHITE: So, that picture came out at
- election at the time we were using the
- 20 little-bitty OS scanners that used to be part of
- the Montgomery County system. In fact, we
- processed an election without 60,000 return

- ballots that way. The only time we actually used
- the high-speed scanner in my old jurisdiction for
- 3 a mail-ballot election was when we mailed out a
- 4 hundred thousand ballots. So, you can actually
- 5 accomplish a lot the small precinct bubble
- 6 scanners. Of course now in Montgomery we do have
- 7 the 850 -- the SA850s -- and with the two-page
- $^{8}$  ballot that's very long, it's a lifesaver. But,
- 9 yeah, you could certainly do it with -- especially
- with this low volume. You don't need a high-speed
- 11 scanner.
- MS. EVANS: And from that, I guess we're
- not seeing this possible -- yeah, because as we
- talk about security for our future (inaudible).
- MR. MASTERSON: It's an interesting
- 16 point. I think we might -- it depends on the cost
- of what? I think if we can get to the point where
- 18 components are available and whatnot, the ability
- 19 to sustain -- the cost of a voting system in
- 20 particular but really any election system -- and
- this is a big lesson learned from HAVA -- isn't
- just in the system itself. And I think --

- sometimes we tend to think of them as a commodity
- that I purchase, like the bottle of water, but
- when you pay for a piece of election technology,
- 4 you're also paying for training and for
- 5 maintenance and for sustainability -- right -- for
- 6 upgrades and the consumables, so memory sticks and
- 7 printing ballots. That's a consumable.
- 8 And so as you evaluate the cost of
- 9 election technology, keep all of those things in
- mind, right? And I actually think with the
- efficiencies, election officials are beginning to
- find in the process in a variety of election
- 13 technologies. I actually think that there will be
- 14 cost savings as you look at the life cycle, the
- entire life cycle of the voting equipment, even if
- the purchase price has remained the same or
- increased with inflation or whatnot.
- 18 Also I was thinking about the question
- 19 about auditing as well, and one of the interesting
- 20 -- and this doesn't go to your exact question
- 21 about reviewing the result, but I know Maryland
- did an audit where they reviewed every ballot

- image in the entire state. They had a vendor look
- 2 at it. And so one of the questions when you talk
- about auditing -- we talk about personal election
- 4 audits, looking at the result and confirming that,
- 5 but there's real value in audits like that.
- Are there any accountants in the room?
- 7 (Laughter) One? Okay. All election officials are
- 8 accountants, too. That's also one of your jobs.
- 9 You guys do accounting techniques and practices in
- 10 everything you do.
- The value in looking at those ballot
- images in Maryland -- the folks in the state have
- talked about this -- it really spoke to ways to
- improve ballot layout and design, so you talk
- about -- there's another one -- one of the big
- 16 areas of improvement since HAVA is laying out
- election materials and ballots. So, we have a lot
- of information on our website about designing
- ballots, designing election materials in a usable
- way for voters.
- 21 And I'll give you an example from Ohio.
- We had a provisional ballot envelope that had been

- the same for several years, and we were looking at
- our provisional ballot rejection rates and
- evaluating the usability of the envelope. And we
- 4 made a couple of really simple layout changes to
- 5 the provisional envelope and saw a tangible
- 6 increase in the number of provisional ballots
- 7 counted because the voter understood and only
- 8 filled -- you know, had to fill out exactly what
- 9 they needed -- and so usability of election
- materials, including the ballots.
- And when Maryland looked at those scans
- they saw the mistakes voters were making, right?
- You could actually physically look at how they're
- marking the ballot and even see -- even when they
- weren't marking something -- where they would
- 16 raster, stop -- right? -- because they're
- 17 rastering. And so you could see that voter
- 18 experience in those scans.
- So, I know the State of Maryland made
- changes to -- or looked at changes to ballots by
- 21 (inaudible) poor worker training and better
- education to try to create a better experience for

- $^{
  m 1}$  the voter, just by looking at the scans. And
- that's an audit. I mean, the process isn't just
- 3 that end result. Auditing your voter registration
- 4 systems, looking at ballot images and layout --
- 5 that's all part of a full audit of a process. It
- 6 can't just be about that last step, and there's a
- 7 variety of ways to do that. So, I jumped around
- 8 there as I was thinking, but that's -- usability
- 9 of this stuff has really improved, and there's a
- 10 lot of information out there now about laying out
- 11 ballot materials and doing that.
- So, I think I kind of answered your
- 13 question I hope?
- MR. VILLAO: Carlos Villao, City of
- 15 Gaithersburg. I have a question in regards to
- 16 voting focus on
- voter's terms. That was one of your
- 18 topics in your presentations.
- MR. MASTERSON: Mm-hmm.
- MR. VILLAO: You could also call it
- redefining early voting. Like, if a voter wanted
- 22 to wait -- not wait till November and want to

- 1 vote, for example, in January. For some reason,
- 2 her term was to vote in January. Is it possible
- 3 to keep that vote secure throughout the whole year
- 4 and make a count come November for that upcoming
- 5 election? Would that be possible? Or, I mean,
- 6 how would you --
- 7 MR. MASTERSON: Man, and I thought we
- 8 had a lot of early voting in Ohio. (Laughter)
- 9 SPEAKER: So you won't have candidates
- 10 by then.
- MR. MASTERSON: Yeah. And so just
- engaging the hypothetical -- right? -- is what
- you're presenting? My opinion is yes, because
- what would happen is, just like you all do all the
- time, if there was a law passed telling you to do
- that, you would work through and identify the
- 17 risks and the mitigations in order to be --
- What your question really raises, which
- 19 I think is a really question is: As you look at
- 20 changes in laws and procedures, one of the things
- you all have to do is evaluate what new risks
- enter into the process. And those aren't just

- 1 security risks. You know, that's part of it. But
- 2 also the larger risks in the process are
- 3 human-factor risks, right? What new
- 4 mess-up/screw-ups does this introduce for my
- office, for the poll workers, for the voter that
- 6 can cause this ballot either not count or not
- 7 reflect the intent of the voter. And so I think
- 8 if it were a change in law that had people voting
- 9 in January, I think it would be incumbent on all
- of us that were impacted to sit there and really
- 11 think through how would I secure this? What are
- the risks? How do I mitigate those risks?
- 13 (Inaudible) but I think you'd find a way to do it,
- because you need to at that point, and so I think
- as you look at these general changes to serving
- voters better, that's the questions that election
- officials that are implementing these changes are
- 18 asking themselves: How do we secure a drop box
- that's sitting out in the public for folks to drop
- 20 it off? What steps do I need to take to secure
- that in developing that security plan around it?
- MS. WHITE: And I can also tag onto his

- a little bit by saying that, you know, we would
- 2 secure ballots in the same way we secure them now,
- by keeping them under -- you know -- we have card
- 4 access, cameras on our ballot room whether it's in
- 5 there for 40 days or if it's in there for 10
- 6 months.
- But also people don't realize there are
- 8 also requirements that we keep uncounted ballots
- 9 so if the provisional was rejected we're required
- 10 to keep it for
- months. That ballot, by law, cannot be
- opened and therefore we have to continue secure
- ballots for an extended period of time and then
- destroy them properly. So, those procedures
- already exist as well for those reasons.
- MR. VILLAO: Thank you.
- 17 CHAIR NEUMAN: Time for maybe one or two
- 18 more questions.
- MS. HERNANDEZ: Awilda Hernandez from
- 20 the City of Bowie.
- Prince George's County does not allow
- our municipalities to use their poll book, so we

- 1 struggle with that. My city is the largest in the
- 2 municipality. Have any other states had issues
- with using poll books? One of the reasons is
- 4 because it's -- we tried to do it using the poll
- 5 books through a vendor of equipment, but they
- 6 don't want to release the data because of security
- 7 issues. So, I was just wondering if any other
- 8 states have had issues with --
- 9 MR. MASTERSON: With using the poll
- 10 books?
- MS. HERNANDEZ: Yes, from -- whether
- 12 from
- 13 (inaudible).
- MR. MASTERSON: Yeah, so that -- oh,
- 15 man.
- MS. HERNANDEZ: (Inaudible) go about
- doing.
- 18 MR. MASTERSON: Yeah. The answer is not
- that I know of, but let me get back to you. Like,
- let me see if I can dig around a little bit to
- 21 find similar situations like that to see if I can
- get you some help.

- MS. HERNANDEZ: That's one of the issues
- with -- at least for us -- to get people moving
- fast, because we get cards. So, you have to,
- 4 like, have my poll workers manually go digging
- 5 through little cards for that person's name and,
- 6 you know, give it to them and all that, where the
- 7 poll books - you know, you just type in an it's
- 8 right there.
- 9 MR. MASTERSON: Yeah.
- MS. HERNANDEZ: So, you know, that for
- me -- at our last election that was one of the
- biggest complaints from my voters, right?
- MR. MASTERSON: Sure.
- MS. HERNANDEZ: The process of voting
- went smoothly, but it was the process of just the
- 16 checking in.
- MR. MASTERSON: Yup.
- MS. HERNANDEZ: I mean, I had some
- 19 places the lines were going out the door.
- MR. MASTERSON: Yeah. So, I --
- MS. HERNANDEZ: (Inaudible) frustrated.
- MR. MASTERSON: You actually just made

- me think of another cool customer service
- innovation that may help you as well, and then I
- will get back to you if I can think of an example.
- 4 But that is, to the extent that you have lines,
- one of the ways to improve the experience and
- 6 mitigate lines is to have line walkers go out and
- 7 simply look up to make sure that the voters are in
- 8 the right place before they ever get in there to
- 9 check in. One, it helps get those voters out of
- that line, so you shorten your line. Two, it
- doesn't waste their time until they get into the
- 12 check-in spot. And, three, it means you have less
- provisional voters -- right? -- that are standing
- $^{14}$  there, and that's just simple line walking. And
- so even if you don't have the poll books, assuming
- that there's some sort of tool to be able to look
- where the voters registered on the state website
- or county website, you can have line walkers at
- least go out and begin to ask folks, you know, to
- 20 make sure that they're in the right place and at
- the right plan. That's just a simple customer
- service step that you could take, and I know

- 1 jurisdictions that have done it have had
- 2 incredible success improving their lines but also
- 3 improving the customer experience on that. And
- 4 then I'll get back to you. Your question's a good
- 5 one.
- 6 MS. HERNANDEZ: Thank you.
- 7 CHAIR NEUMAN: Going once, twice?
- 8 MR. MASTERSON: Can I say something
- 9 before you --
- 10 CHAIR NEUMAN: Anyone -- do you have
- anything else to add?
- MR. MASTERSON: Ladies first.
- SPEAKER: No, no, I have nothing.
- MR. MASTERSON: Are you sure?
- SPEAKER: Yes, go right ahead.
- MR. MASTERSON: Well, I always -- when
- 17 I'm in a room with election officials, I do like
- to close with, and that is a thank you. Election
- officials, when everything goes right are told:
- Well, yeah, that was your job; of course it went
- 21 right. And when everything goes wrong, you're
- 22 asked a million questions or even when something

- is perceived to have gone wrong and it didn't.
- 2 And so you all deserve to hear a thank you for the
- incredible work you do serving democracy.
- 4 You know, the reason this process works
- is because you all are so diligent in engaging in
- 6 these details and grinding through these
- 7 nitty-gritty -- and someone that just kind of fell
- 8 into this work, this line of work. You either
- 9 love it or you leave it really quickly, because it
- is a grind, right? And so thank you for your
- incredible work, what you do to serve the voters
- in your jurisdiction. You all don't hear it
- enough, and it's so critically important. So,
- let's -- thank you for what you do.
- 15 CHAIR NEUMAN: And thank you, and thank
- 16 you both as well.
- There is food. Please help yourself
- 18 before you leave. And both Matt and Jessica are
- 19 still here. If you want to talk with them
- informally, please feel free. Thank you all very
- much for coming, and we to see you again for the
- 22 third forum. Have a safe trip home.

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MR. MASTERSON: Thank you for organizing
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     this.
 2
                       (Applause)
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                       (Whereupon, at 9:00 p.m., the
 5
                      CONFERENCE was adjourned.)
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